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June 15, 2007

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The Honorable Chairman and Members of the
Hawaii Public Utilities Commission
465 South King Street
Kekuanaoa Building, 1st Floor
Honolulu, Hawaii 96813

PUBLIC UTILITIES
COMMISSION

2007 JUN 15 P 4:05

FILED

Dear Commissioners:

Subject: Docket No. 2006-0386
HECO 2007 Test Year Rate Case – June 2007 Updates

Enclosed are updates to Hawaiian Electric Company, Inc.'s ("HECO") 2007 test year estimates reflected in the Application, Direct Testimonies, Exhibits and Workpapers filed with the Commission on December 22, 2006. This first set of updates includes incorporation of certain recorded 2006 results as well as other corrections and revisions as explained in the enclosed. The updates also refer to or include revisions that the Company previously filed in its responses to information requests from the other parties. HECO is submitting these updates in advance of other updates that will be filed shortly to provide the Consumer Advocate and the Department of Defense with additional time for review.

Very truly yours,

Dean K. Matsuura
Director, Regulatory Affairs

Enclosure

cc: Division of Consumer Advocacy
Sawvel & Associates, Inc.
Utilitech, Inc.
Dr. Khojasteh Davoodi
Ralph Smith, Larkin & Associates
Randall Y.K. Young, Esq. (w/o enclosure)

JUNE 2007 UPDATE

Ref: R. Sakuda, HECO T-4, Fuel Expense, Fuel Related Expense, and Fuel Inventory

HECO Response:

See HECO's response to CA-IR-214 for the Company's updated test year 2007 fuel expense, fuel related expense and fuel inventory. See also the updated exhibits and workpapers attached to the CA-IR-214 response for documents supporting the amounts.

JUNE 2007 UPDATE

Ref: D. Ching, HECO T-5, Purchased Power Expense

HECO Response:

For HECO T-5, adjustments were made to increase the 2007 test year total purchased power expense by \$764,055. This amount is comprised of 1) an increase of \$799,346 to energy payments, offset by 2) a decrease of \$35,291 to capacity payments.

ENERGY PAYMENTS

The increase of \$799,346 resulted primarily from an increase of approximately \$223,000 to Kalaeloa's energy payment, \$493,000 to AES Hawaii's energy payment, and \$82,000 to H-POWER's energy payment.

For Kalaeloa, the May 2007 production simulation run dispatched Kalaeloa 802 MWH more than in the September 2006 run for direct testimony purposes. Together with a slight increase to the GNIPD escalator, this resulted in the increased Kalaeloa energy payment.

For AES-Hawaii, there was no increase in MWH purchased in the May 2007 run as compared to the September 2006 run. However, there was a slight increase to the GNIPD escalators, which resulted in the increased AES-Hawaii energy payment.

For H-POWER, the May 2007 run dispatched H-POWER 68 MWH less than in the September 2006 run. However, there were slight increases to the on-peak and off-peak energy payment rates, which resulted in the increased H-POWER energy payment.

CAPACITY PAYMENTS

The decrease of \$35,291 resulted entirely from the projected decrease in bonus payment to AES-Hawaii. Capacity payments to Kalaeloa, AES-Hawaii, and H-POWER did not change from those in the direct testimony.

For the AES-Hawaii bonus payment, the decrease was a result of a slightly lower forecast of the two year running average of AES-Hawaii's equivalent availability factor and a slightly higher forecast of the GNPIPD escalator, on which the bonus payment is calculated.

Hawaiian Electric Company, Inc.

TOTAL PURCHASED POWER EXPENSES
Recorded 2006 and 2007 Test Year Estimate at Direct and June 2007 Update
In Dollars

	(a) 2006 Recorded	(b) 2007 Test Year Estimate @ Direct	(c) Adjustments	(d) Updated 2007 Test Year Expense	(e) Column (d) - Column (a)	(f) Column (e) / Column (a)
Energy Payments	251,325,844	277,432,042	799,346	278,231,388	26,905,544	10.71%
Firm Capacity Payments	106,687,556	108,676,065	-35,291	108,640,774	1,953,218	1.83%
Total Purchase Power Expenses	358,013,400	386,108,107	764,055	386,872,162	28,858,762	8.06%

Totals may not add due to rounding.

Hawaiian Electric Company, Inc.

JUNE 2007 UPDATE TEST YEAR PURCHASED ENERGY FORECAST

	Test Year (GWh)
As-available	
1. Chevron	1
2. Tesoro	5
Subtotal	6
Firm Capacity	
1. H-POWER	337
2. Kalaeloa	1,490
3. AES Hawaii	1,540
Subtotal	3,368
TOTAL TEST YEAR PURCHASED ENERGY (GWh)	3,373

Note: Totals may not add due to rounding.

Hawaiian Electric Company, Inc.

PURCHASED ENERGY FORECAST
COMPARISON OF DIRECT AND JUNE 2007 UPDATE

	HECO Direct (GWh)	HECO Update (GWh)	Difference (GWh)
As-available			
1. Chevron	1	1	0
2. Tesoro	5	5	0
Subtotal	6	6	0
Firm Capacity			
1. H-POWER	338	337	0
2. Kalaeloa	1,489	1,490	1
3. AES Hawaii	1,540	1,540	0
Subtotal	3,367	3,368	1
TOTAL TEST YEAR PURCHASED ENERGY (GWh)	3,373	3,373	1

Note: Totals may not add due to rounding.

Hawaiian Electric Company, Inc.

2007 TEST YEAR ENERGY EXPENSE
(\$000)

	2007 Update Test Year
Kalaeloa -- Fuel	145,449
Additive	2,386
Non-Fuel	20,814
Shortfall	0
Total	168,649
AES Hawaii -- Fuel	41,418
O&M	28,578
Total	69,995
H-POWER -- Energy	38,812
Other	
Chevron	77
Tesoro	698
Total	775
Total Energy	278,231

Note: Totals may not add due to rounding.

Hawaiian Electric Company, Inc.

TEST YEAR ENERGY EXPENSE
COMPARISON OF DIRECT AND JUNE 2007 UPDATE
(\$000)

	HECO Direct	HECO UPDATE	Difference
Kalaeloa -- Fuel	145,372	145,449	76
Additive	2,374	2,386	12
Non-Fuel	20,680	20,814	134
Shortfall	0	0	0
Total	168,426	168,649	223
AES Hawaii -- Fuel	41,126	41,418	292
O&M	28,377	28,578	201
Total	69,503	69,995	493
H-POWER -- Energy	38,730	38,812	82
Other			
Chevron	77	77	0
Tesoro	696	698	2
Total	773	775	2
Total Energy	277,432	278,231	799

Note: Totals may not add due to rounding.

Hawaiian Electric Company, Inc.

2007 TEST YEAR FIRM CAPACITY EXPENSE

Firm Capacity Producer	Capacity Payment (\$000) Update
Kalaeloa	32,719
AES Hawaii	67,891
H-POWER	6,877
AES Hawaii Bonus	1,154
TOTAL	108,641

Note: Totals may not add due to rounding.

Hawaiian Electric Company, Inc.

TEST YEAR FIRM CAPACITY EXPENSE
COMPARISON OF DIRECT AND JUNE 2007 UPDATE

Firm Capacity Producer	Capacity Payment (\$000)		
	HECO Direct	HECO Update	Difference
Kalaeloa	32,719	32,719	0
AES Hawaii	67,891	67,891	0
H-POWER	6,877	6,877	0
AES Hawaii Bonus	1,189	1,154	(35)
TOTAL	108,676	108,641	(35)

Note: Totals may not add due to rounding.

Kalaheo 2007 Rate Case Forecasted Expenses
5/21/2007 Production Simulation Update

Assumptions:

Forced Outage Rate	1.50%	Capacity Cost per kW-mo., up to 180 MW	\$13.70	4Q 2003 Base Additive GNPIPD	107.18
Base GNPIPD	73.944	Capacity Cost per kW-mo., over 180 MW up to 208 MW	\$9.33	4Q 2006 Current Additive GNPIPD	118.889
4Q 2006 GNPIPD	118.889	O&M (Non-fuel) Base per kWh, up to minimum purchase	\$0.0098	Additive transition multiplier	1.019702277
Base LSFO Fuel Price	\$19.5000	O&M (Non-fuel) Base per kWh, above minimum purchase	\$0.0048	Variable O&M credit applied to	May
2007 LSFO Fuel Price	\$27.5970	< 180 MW	\$0.0048		
		>= 180 MW	\$0.0044		
		Base Fuel Additive per kWh	\$0.00144		
		Shortfall Energy per kWh	\$0.0008		

Worksheet Modified:
 Latest Data Input:
 Print:

11-Aug-08
 13-Jun-07
 13-Jun-07

	One CT			Two CTs			EAF Calculation				TOTAL FACILITY						
	net MWh	Op Hrs	Avg MW	net MWh	Op Hrs	Avg MW	Monthly EAF	YTD EAF	Energy MWh	Fuel Only No additive	Additive Only	Total Fuel	O&M (Non-fuel) Independent of Minimum Purch	Variable O&M Credit	Capacity Up to 180 MW	Capacity Over 180 MW	Total Expense
Jan	15.957	177	90.000	110.008	594	198.020	82.15%	92.15%	125,965	\$12,339,620	\$201,718	\$12,541,338	\$1,911,577		\$2,465,250	\$261,333	\$17,179,499
Feb	38.129	437	90.000	9	0	0.000	29.81%	62.47%	39,328	\$4,378,126	\$62,979	\$4,441,105	\$596,821		\$2,465,250	\$261,333	\$7,784,509
Mar	14.627	163	90.000	111.473	587	196.476	83.73%	73.24%	128,100	\$12,332,236	\$201,935	\$12,534,171	\$1,913,828		\$2,465,250	\$261,333	\$17,174,380
Apr	8.308	103	90.000	119.195	608	196.515	86.50%	79.55%	128,413	\$12,472,950	\$205,639	\$12,678,589	\$1,948,727		\$2,465,250	\$261,333	\$17,353,899
May	8.510	95	90.000	127.780	638	200.194	86.50%	83.44%	136,290	\$13,217,111	\$218,253	\$13,435,364	\$2,086,264	(\$1,881,261)	\$2,465,250	\$261,333	\$16,428,950
Jun	8.840	104	90.000	120.628	600	201.092	86.50%	85.84%	130,468	\$12,678,415	\$208,930	\$12,887,345	\$1,979,812		\$2,465,250	\$261,333	\$17,593,840
Jul	8.308	103	90.000	127.502	629	202.572	86.50%	87.77%	136,810	\$13,279,251	\$219,085	\$13,498,336	\$2,078,185		\$2,465,250	\$261,333	\$18,301,074
Aug	8.778	98	90.000	126.368	635	202.050	86.50%	89.14%	137,144	\$13,303,183	\$219,620	\$13,522,804	\$2,081,224		\$2,465,250	\$261,333	\$18,330,811
Sep	10.372	115	90.000	118.523	594	199.549	85.22%	88.81%	128,895	\$12,535,510	\$206,411	\$12,741,921	\$1,958,041		\$2,465,250	\$261,333	\$17,424,545
Oct	8.510	95	90.000	129.688	638	203.183	86.50%	90.70%	138,198	\$13,400,322	\$221,308	\$13,621,630	\$2,097,219		\$2,465,250	\$261,333	\$18,445,432
Nov	8.778	98	90.000	121.574	612	198.752	86.50%	91.40%	130,350	\$12,650,807	\$208,741	\$12,859,548	\$1,978,122		\$2,465,250	\$261,333	\$17,564,253
Dec	10.372	115	90.000	121.813	618	197.400	86.50%	92.00%	132,285	\$12,881,028	\$211,839	\$13,092,868	\$2,007,486		\$2,465,250	\$261,333	\$17,806,635
Total	153,687	1,708	90,000	1,336,560	6,693	199.682	82.08%	1,499,248	\$145,448,559	\$2,388,458	\$147,835,018	\$22,815,172	(\$1,881,261)	\$0	\$29,583,808	\$3,138,000	\$201,367,927

DATA SOURCES AND NOTES:

Refer to the letter grid across the top of the page for the column address and the line number on the left side for the row number. General reference to a column without reference to a row means to use the data for the corresponding month. Otherwise a specific row reference is in () next to the column designation. Calculation on one sheet of the spreadsheet may draw on data from another sheet. Elements of a formula that reference data from another sheet are preceded by an "A:" if the data are from the SUMMARY sheet and preceded by a "B:" if the data are from the BACKUP sheet.

1. Forced Outage Rate in cell E(8) is based on the approximate actual performance and forecasted performance.
2. Base GNPIPD in cell E(9) is from the GNPIPD value on 1/1/88 per the Kalaheo PPA, p50. This value is the 4th quarter 1987 GNPIPD as updated per Bureau of Economic Analysis publication as of March 29 2007. Value is consistent with the June 30, 2003 letter agreement with KPLP.
3. 4Q 2006 GNPIPD in cell E(10) is the 4th quarter 2006 GNPIPD as updated per Bureau of Economic Analysis publication as of March 29 2007.
4. Base LSFO Fuel Price in cell E(11) is from the Kalaheo PPA, p49.
5. 2007 LSFO Fuel Price in cell E(12) is from C. Shigeta's 9/29/2008 e-mail.
6. Capacity Cost per kW-mo., up to 180 MW, in cell J(8) is based on calculations per Kalaheo PPA Amendment 2, p5.
7. Capacity Cost per kW-mo., over 180 MW up to 208 MW, in cell J(9) is from the Kalaheo PPA Amendment No. 6.
8. O&M Base per kWh, up to the minimum purchase amount, in cell J(10) is from the Kalaheo PPA Amendment 2, p2.
9. O&M Base per kWh, above the minimum purchase amount, for loads < 180 MW, is from proposed Kalaheo PPA amendment No.5, p10.
10. O&M Base per kWh, above the minimum purchase amount, for loads >= 180 MW, in cell J(13) is from Kalaheo PPA amendment No.5, p 10.

11. 4Q Base Additive GNPIPD in cell R(8) is the value on 1/1/2004 per the Kalaheo PPA Amendment 5, page 4. This value is the 4th quarter 2003 GNPIPD as updated per Bureau of Economic Analysis publication as of March 29, 2007.
12. The additive transition multiplier in cell R(10) is from the Kalaheo PPA Amendment 5, p. 7.
13. 4Q 2006 Current Additive GNPIPD in cell R(9) per Kalaheo PPA amendment 5, pg 4 is the same value as in Note 3.
14. Base Fuel Additive per kWh in cell N(10) is based on Kalaheo PPA, p50.
15. Shortfall Energy Cost per kWh in cell N(11) is based on Kalaheo PPA, p51.
16. The net MWh and Op Hours in cells C and D, respectively, and cells F and G, respectively, are from the HECO 2007 Operational/Budget Production Simulation dtd 5/21/07.
17. The Avg MW in cell E is calculated from C/D. The Avg MW in cell H is calculated from F/G.
18. The monthly EAF in cell I is calculated from ((B C * 24) - B D - B E) / (B C * 24).
19. The YTD EAF in cell J is calculated as follows. The first month is from I. Subsequent months are calculated from J (from previous month) * (sum B,C(existing and previous months) * 24) + (I * B C * 24) / (sum B C(existing and previous months) * 24).
20. The Energy MWh in cell K is calculated from C * F.
21. The Fuel Only No Additive cost in cell L is calculated from B H + B M.
22. The Additive Only cost in cell M is calculated from B I + B N.
23. The Total Fuel cost in cell N is calculated from L + M.
24. The O&M (Non-fuel) cost in cell O is calculated from J(10) * 1000 * K * (E10 / E9), where column K values are the monthly MWh. Value is shown regardless of status relative to the minimum purchase level.
25. The variable O&M credit is Col P calculated from (E10 / E9 * 1000) * ((B T(82) * J(10)) - (B S(82) * J(12)) - (B S(82) * J(13))). The credit is input as a negative sign relative to expenses elsewhere on this spreadsheet. It appears only in the month of May, to reflect reconciliation at the end of the Contract Year.
26. Col Q is empty.
27. The Capacity cost, up to 180 MW, in cell R is calculated from J(8) * 180,000.
28. The Capacity cost, over 180 MW, in cell S is calculated from J(9) * 28,000.
29. The Total Expense cost in cell T is the sum of columns N + O + P + R + S. Col Q is empty.
30. The Total Shortfall Cost in cell U(39) is from B N(48).

Total Shortfall Cost	38
Total Expense	\$201,367,927

Kalaheo 2007 Rate Case Forecasted Expenses 5/21/2007 Production Simulation Update

Assumptions: See SUMMARY sheet

AVAILABILITY DATA			ONE CT ENERGY					TWO CT ENERGY				
Calendar Days	Planned Maintenance EHrs Out	Forced Outage EHrs Out	Base Fuel Comp cents/kWh	Total Energy cents/kWh	Fuel Only No additive	Additive Only	Total fuel	Base Fuel Comp cents/kWh	Total Energy cents/kWh	Fuel Only No additive	Additive Only	Total Fuel
31	48.00	10.44	3.211394	11.292477	\$1,776.367	\$25.553	\$1,801,940	2.770000	9.762379	\$10,563,233	\$176,165	\$10,739,398
28	470.00	3.03	3.211394	11.292477	\$4,378,126	\$62.979	\$4,441,105	0.000000	0.160139	\$0	\$0	\$0
31	38.00	10.62	3.211394	11.292477	\$1,628,355	\$23.424	\$1,651,779	2.770000	9.762379	\$10,703,882	\$178,511	\$10,882,392
30	0.00	10.80	3.211394	11.292477	\$1,038,228	\$14.906	\$1,053,132	2.770000	9.762379	\$11,436,725	\$190,733	\$11,627,457
31	0.00	11.16	3.211394	11.292477	\$947,407	\$13.628	\$961,035	2.770000	9.762379	\$12,269,705	\$204,824	\$12,474,329
30	0.00	10.80	3.211394	11.292477	\$1,095,439	\$15.758	\$1,111,197	2.770000	9.762379	\$11,582,978	\$193,172	\$11,776,149
31	0.00	11.16	3.211394	11.292477	\$1,036,228	\$14.906	\$1,051,132	2.770000	9.762379	\$12,243,025	\$204,179	\$12,447,204
31	0.00	11.18	3.211394	11.292477	\$977,013	\$14.054	\$991,067	2.770000	9.762379	\$12,326,170	\$205,566	\$12,531,737
30	24.00	10.44	3.211394	11.292477	\$1,154,852	\$16.810	\$1,171,261	2.770000	9.762379	\$11,360,858	\$189,801	\$11,550,660
31	0.00	11.18	3.211394	11.292477	\$947,407	\$13.628	\$961,035	2.770000	9.762379	\$12,452,915	\$207,880	\$12,660,595
30	0.00	10.80	3.211394	11.292477	\$977,013	\$14.054	\$991,067	2.770000	9.762379	\$11,873,794	\$194,888	\$11,868,480
31	0.00	11.18	3.211394	11.292477	\$1,124,652	\$18.810	\$1,143,461	2.770000	9.762379	\$11,706,375	\$195,230	\$11,801,604
365	578	122.73			\$17,108,901	\$246,111	\$17,355,012			\$128,338,658	\$2,140,346	\$130,480,004

DATA SOURCES AND NOTES. See SUMMARY sheet and below

Refer to the letter grid across the top of the page for the column address and the line number on the left side for the row number. General reference to a column without reference to a row means to use the data for the corresponding month. Otherwise a specific row reference is in () next to the column designation. Calculation on one sheet of the spreadsheet may draw on data from another sheet. Elements of a formula that reference data from another sheet are preceded by an "A:" if the data are from the SUMMARY sheet and preceded by a "B:" if the data are from the BACKUP sheet.

Planned Maintenance Equivalent Hours (EHrs) Out in col D is based in part on a template provided by the HECO planned maintenance schedule revised on 7/21/06. This template and the assumed EAF of 92.0% and EFOR of 1.5% are used to estimate the corresponding number of equivalent full plant hours outage for the respective months. The result is maintenance outage equivalent full plant hours of 48 in January, 470 in February, 38 in March and 24 in September.

The Forced Outage Equivalent Hours (EHrs) Out in col E is calculated from $A:E(8) * ((C * 24) - D)$.
 The Base Fuel Component in cents per kWh in col F is calculated from the one CT operation formula in the Kalaheo PPA, p50. The load data are from A:E.
 The Total Energy in cents per kWh in col G is calculated from $(F * A:E(12) / A:E(11)) + (A:N(10) * 100 * A:N(9) / A:N(8))$.
 The LSFO Actual / LSFO Base Fuel Price $A:E(12) / A:E(11)$ assumes a 6.0 million Btu per barrel content for LSFO Actual and LSFO Base fuel prices.
 The Fuel Only-No Additive cost in col H is calculated from $(A:C * 1000 / 100) * F * A:E(12) / A:E(11)$.
 The Additive Only cost in col I is calculated from $A:C * 1000 * A:N(10) * A:N(9) / A:N(8)$.
 The Total Fuel cost in col J is calculated from $H + I$.
 The Base Fuel Component in cents per kWh in col K is calculated from the two CT operation formula in the Kalaheo PPA, Amendment 2, p2. The load data are from A:H.
 The Total Energy in cents per kWh in col L is calculated from $(K * A:E(12) / A:E(11)) + (A:N(10) * 100 * A:N(9) / A:N(8))$.
 The LSFO Actual / LSFO Base Fuel Price $A:E(12) / A:E(11)$ assumes a 6.0 million Btu per barrel content for LSFO Actual and LSFO Base fuel prices.
 The Fuel Only-No Additive cost in col M is calculated from $(A:F * 1000 / 100) * K * A:E(12) / A:E(11)$.
 The Additive Only cost in col N is calculated from $A:F * 1000 * A:N(10) * A:N(9) / A:N(8)$.
 The Total Fuel cost in col O is calculated from $M + N$.
 Notes 43 through 48 refer to the Shortfall Calculation.
 The Adjusted Minimum Purchase in GWh is calculated from $1235 * (\text{minimum of } 92\% / 85\% \text{ or } A:J(36) / 85\%)$.
 The Actual Annual Purchase in GWh is from $A:K(36) / 1000$.
 The Shortfall in GWh is calculated from $N(40) - N(41)$.
 The O&M Base Shortfall Cost is calculated from the absolute value of $(A:J(10) * N(42) * 1000000 * A:E(10) / A:E(9))$. If $N(42)$ is <= zero, the calculation yields zero.
 The Fuel Shortfall Cost is calculated from the absolute value of $(A:N(11) * N(42) * 1000000)$. If $N(42)$ is <= zero, the calculation yields zero.
 The Total Shortfall Cost is calculated from $N(44) + N(46)$.
 The input data for the Above Minimum Purchase box categorized by < 180 MW and >= 180 MW are from the HECO 2007 Operational/Budget Production Simulation dtd 9/28/06. The monthly totals may differ from respective cells in A:K due to minor roundoffs.

SHORTFALL CALCULATION

Adjusted Min Purch	1,338,708 GWh
Actual Annual Purchase	1,490,248 GWh
Shortfall	(151,540) GWh
O&M Base Shortfall Cost	\$0
Fuel Shortfall Cost	\$0
Total Shortfall Cost	\$0

ABOVE MINIMUM PURCHASE

153,540 MWH		
136,290 MWH	May 2007	
17,250 MWH	Part of April 2007	
	Energy (MWH)	Energy (MWH)
	at < 180 MWH	at >= 180 MWH
May subtotal	28,705	107,422
		Total
		136,127
May subtotal	28,705	107,422
		136,127
April 27 to 30	4170	11980
April 26 (partial day)	178	797
April subtotal	4,348	12,777
		17,125
March	0	0
March or (partial day)	0	0
March subtotal	0	0
Above minimum purchase starts in the hour after the minimum purchase is exceeded such that the total may not exactly match shortfall calculation.		
Total	33,053	120,199
		153,252

AES Hawaii, Inc. 2007 Operational/Budget Forecasted Expenses 5/21/2007 Production Simulation Update - Rate Case

Assumptions:

Forced Outage Rate	1.00%	3rd Q 2006 GNPIPD	116.414
Base GNPIPD	72.465	1st Q 2007 GNPIPD	117.510
Capacity-\$/kWh available	\$0.044095	Fixed O&M-\$/kWh available	\$0.011
Variable O&M-\$/kWh purchased	\$0.0005		

	ONE BOILER			TWO BOILERS			EAF CALCULATION		TOTAL FACILITY					
	net MWh	Op Hrs	Avg MW	net MWh	Op Hrs	Avg MW	Monthly EAF	YTD EAF	Energy MWh	Fuel	Variable O&M	Fixed O&M	Capacity	Total Expense
Jan	0	0	0.000	132,883	738	180.009	99.00%	99.00%	132,883	\$3,607,725	\$106,737	\$2,342,881	\$5,846,150	\$11,903,493
Feb	0	0	0.000	119,578	684	180.006	99.00%	99.00%	119,578	\$3,246,496	\$96,050	\$2,116,151	\$5,280,394	\$10,739,091
Mar	0	0	0.000	132,495	736	179.996	99.00%	99.00%	132,495	\$3,597,178	\$108,428	\$2,342,881	\$5,846,150	\$11,892,635
Apr	0	0	0.000	128,563	714	180.010	99.00%	99.00%	128,563	\$3,490,439	\$103,267	\$2,267,304	\$5,657,565	\$11,518,575
May	0	0	0.000	132,408	738	180.000	99.00%	99.00%	132,408	\$3,594,820	\$106,356	\$2,342,881	\$5,846,150	\$11,890,207
Jun	0	0	0.000	128,477	714	179.990	99.00%	99.00%	128,477	\$3,488,086	\$103,198	\$2,267,304	\$5,657,565	\$11,516,153
Jul	0	0	0.000	132,365	735	179.990	99.00%	99.00%	132,365	\$3,627,477	\$107,322	\$2,364,938	\$5,846,150	\$11,945,888
Aug	0	0	90.000	132,495	736	179.996	99.00%	99.00%	132,495	\$3,631,044	\$107,428	\$2,364,938	\$5,846,150	\$11,949,561
Sep	0	0	0.000	128,909	716	179.990	99.00%	99.00%	128,909	\$3,532,764	\$104,520	\$2,288,650	\$5,657,565	\$11,583,499
Oct	21,384	238	0.000	89,381	487	179.986	83.03%	97.37%	110,765	\$2,449,493	\$89,809	\$1,983,497	\$4,903,223	\$9,428,021
Nov	0	0	0.000	128,434	714	180.006	99.00%	97.52%	128,434	\$3,519,761	\$104,135	\$2,288,650	\$5,657,565	\$11,570,111
Dec	0	0	0.000	132,538	736	180.005	99.00%	97.64%	132,538	\$3,632,232	\$107,463	\$2,364,938	\$5,846,150	\$11,950,783
Total	21,384	238	90.000	1,518,526	8,436	179.999		97.64%	1,539,910	\$41,417,513	\$1,242,711	\$27,335,015	\$67,890,779	\$137,886,017

DATA SOURCES AND NOTES:

Refer to the letter grid across the top of the page for the column address and the line number on the left side for the row number. General reference to a column without reference to a row means to use the data for the corresponding month. Otherwise a specific row reference is in () next to the column designation. Calculation on one sheet of the spreadsheet may draw on data from another sheet. Elements of a formula that reference data from another sheet are preceded by an "A:" if the data are from the SUMMARY sheet and preceded by a "B:" if the data are from the BACKUP sheet.

1. Forced Outage Rate in cell F(9) is based on approximate actual performance.
2. Base GNPIPD in cell F(10) is the GNPIPD value for the 1st Quarter of 1987 per the AES-Hawaii PPA, Amendment 1, Exhibit 5, p14. Actual value will be from the same Bureau of Economic Analysis publication as the actual current GNPIPD (numerator in GNPIPD adjustment factor), per the May 3, 2001 letter agreement. For now, a recent 1Q1987 GNPIPD value is used for the Base GNPIPD.
3. Capacity cost per available kWh in cell F(11) is based on AES-Hawaii PPA, Amendment dated May 8, 2003, p. 2.
4. Variable O&M cost per kWh purchased in cell F(12) is based on AES-Hawaii PPA, Amendment 1, p7.
5. 3rd Q 2006 GNPIPD in cell K(9) is the actual final value.
6. 1st Q 2007 GNPIPD in cell K(10) is based on the GDP Chain-Type Price Index escalation per Energy Information Administration / Annual Energy Outlook 2007 (Table 1.1, Macroeconomic Indicators), page 165, published February 2007) from the Internet ([http://www.eia.doe.gov/olaf/aao/pdf/0383\(2007\).pdf](http://www.eia.doe.gov/olaf/aao/pdf/0383(2007).pdf); visited site on 5/23/2007).
7. Fixed O&M cost per available kWh in cell K(11) is based on AES-Hawaii PPA, Amendment 1, p7.
8. The net MWh and Op Hrs in columns C and D, respectively and columns F and G, respectively are from the HECO 2007 Operational/Budget Production Simulation dtd 5/21/2007
9. The Avg MW in col E is calculated from C / D. The Avg MW in col H is calculated from F / G.
10. The Monthly EAF in col I is calculated from ((B:C * 24) - B:D - B:E) / (B:C * 24).
11. The YTD EAF in col J is calculated as follows. The first month is from I. Subsequent months are calculated from J (from previous month) * (sum B:C(existing and previous months) * 24) + (I * B:C * 24) / (sum B:C(existing and previous months) * 24).
12. The Energy MWh in col K is calculated from C + F.
13. The Fuel cost in col L is calculated from ((B-J * B:G * F) + (B:H * B:G * C)) * 1000 / 100.
14. The Variable O&M cost in col M is calculated from F(12) * 1000 * B:G * K.
15. The Fixed O&M cost in col N is calculated from K(11) * 1000 * B:F * B:G.
16. The Capacity cost in col O is calculated from F(11) * 1000 * B:F.
17. The Total Expense in col P is calculated by L + M + N + O.
18. The Bonus is calculated on the "Bonus" and "Detailed Bonus Calc" sheets.

Bonus: \$1,154,174

Total Expense: \$139,040,191

JUNE 2007 UPDATE
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Page 2 of 3 (BACKUP sheet)

Workbook Modified: 11-Aug-06
Latest Data Input: 23-May-07
Print: 13-Jun-07

AES Hawaii, Inc. 2007 Operational/Budget Forecasted Expenses 5/21/2007 Production Simulation Update - Rate Case

Assumptions: See SUMMARY sheet

	AVAILABILITY DATA					ONE BOILER		TWO BOILERS	
	Calendar Days	Planned Maintenance EHrs Out	Forced Outage EHrs Out	MWh Available	GNPIPD Ratio	Base Fuel Component cents/kWh	Fuel	Base Fuel Component cents/kWh	Fuel
Jan	31	0	7.44	132,581	1.606486	0.000000	\$0	1.690001	\$3,607,725
Feb	28	0	6.72	119,750	1.606486	0.000000	\$0	1.6899982	\$3,246,496
Mar	31	0	7.44	132,581	1.606486	0.000000	\$0	1.68999543	\$3,597,178
Apr	30	0	7.20	128,304	1.606486	0.000000	\$0	1.69000146	\$3,490,439
May	31	0	7.44	132,581	1.606486	0.000000	\$0	1.6899972	\$3,594,820
Jun	30	0	7.20	128,304	1.606486	0.000000	\$0	1.68999294	\$3,488,086
Jul	31	0	7.44	132,581	1.621610	0.000000	\$0	1.68999306	\$3,627,477
Aug	31	0	7.44	132,581	1.621610	1.786989	\$0	1.68999543	\$3,631,044
Sep	30	0	7.20	128,304	1.621610	0.000000	\$0	1.68999295	\$3,532,764
Oct	31	120	6.24	111,197	1.621610	0.000000	\$0	1.68999108	\$2,449,493
Nov	30	0	7.20	128,304	1.621610	0.000000	\$0	1.68999964	\$3,519,761
Dec	31	0	7.44	132,581	1.621610	0.000000	\$0	1.68999956	\$3,632,232
Total	365	120	86.4	1,539,648			\$0		\$41,417,513

DATA SOURCES AND NOTES: See SUMMARY sheet and below

Refer to the letter grid across the top of the page for the column address and the line number on the left side for the row number. General reference to a column without reference to a row means to use the data for the corresponding month. Otherwise a specific row reference is in () next to the column designation. Calculation on one sheet of the spreadsheet may draw on data from another sheet. Elements of a formula that reference data from another sheet are preceded by an "A:" if the data are from the SUMMARY sheet and preceded by a "B:" if the data are from the BACKUP sheet.

19. Planned Maintenance Equivalent Hours (EHrs) Out in col D assumes 10 days of 90 MW out normalized maintenance (in October).
20. The Forced Outage Equivalent Hours (EHrs) Out in col E is calculated from $A:F(9) * ((C * 24) - D)$.
21. The MWh Available in col F is calculated from $180 * ((C * 24) - D - E)$.
22. The GNPIPD ratio in col G is calculated from $A:K(9) / A:F(10)$ for the months January through June and from $A:K(10) / A:F(10)$ for the months of July through December.
23. The Base Fuel Component in cents per kWh in col H is calculated from the formula in the AES-Hawaii PPA, Amendment 1, p7. The load data are from A:E.
24. The Fuel cost in col I is calculated from $A:C * H * (1000 / 100) * G$.
25. The Base Fuel Component in cents per kWh in col J is calculated from the formula in the AES-Hawaii PPA, Amendment 1, p7. The load data are from A:H.
26. The Fuel cost in col K is calculated from $A:F * J * (1000 / 100) * G$.

AES Hawaii, Inc. 2007 Operational/Budget Forecasted Expenses

5/21/2007 Production Simulation Update - Rate Case

AES Availability Bonus

Two Year Running Avg.
Equivalent Availability Factor (EAF): 96.94%

Per PPA Section 5.2: Availability bonus = \$15,000 (1987\$) per one tenth of a percentage point over 91%, adjusted in accordance with Section 8.1C

Per PPA Section 8.1C: All dollar values noted in Sections 5.2 and 8.1 will be adjusted each Contract Year in accordance with the following formula:

Bonus Corrected = ((C + U) / (C + E)) X GNPIPD Ratio X Liquidated Damage or Bonus (Uncorrected)

C = Capacity Charge
E = Escalated Energy Charge
U = Unescalated Energy Charge

GNPIPD current (forecasted 1st Q for year of payment)	117.510
GNPIPD base	72.465
GNPIPD Adjustment Factor	1.6216
C	4.4095 cents/kWh
U (Fuel equation with 180 MW * EAF as input for plant load + Variable O&M component (0.05 cents/kWh) + Fixed O&M component (1.1 cents/kWh))	2.84 cents/kWh
E (U * (GNPIPD current/GNPIPD base))	4.6023 cents/kWh
((C+U)/(C+E))	0.804237244
EAF > 91% (truncated to nearest 0.1%)	5.9%
Bonus uncorrected	\$885,000
Bonus Corrected	\$1,154,174

Workbook Modified: 11-Aug-06
Latest Data Input: 23-May-07
Print: 13-Jun-07

AES HAWAII, INC. BONUS EQUIVALENT AVAILABILITY CALCULATION

Assumption of forced outage rate for Contract Year 14 = 1.0 percent

Month	Potential kWh	Available kWh	Monthly Percentage	Contract Year Cumulative Percentage
Contract Year 14				
Oct-05	133,920,000	133,920,000	100.00%	100.00%
Nov-05	129,600,000	129,600,000	100.00%	100.00%
Dec-05	133,920,000	133,918,449	100.00%	100.00%
Jan-06	133,920,000	94,848,511	70.82%	92.65%
Feb-06	120,960,000	98,541,482	81.47%	90.57%
Mar-06	133,920,000	132,223,208	98.73%	91.96%
Apr-06	129,600,000	128,032,137	98.79%	92.93%
May-06	133,920,000	124,015,619	92.60%	92.89%
Jun-06	129,600,000	129,452,093	99.89%	93.66%
Jul-06	133,920,000	133,920,000	100.00%	94.30%
Aug-06	133,920,000	133,919,871	100.00%	94.83%
Sep-06	129,600,000	129,599,652	100.00%	95.26%
Totals	1,576,800,000	1,501,991,022		95.26%

Notes

1. Actual data used through September 2006.

TWO YEAR RUNNING AVERAGE EAF FOR CONTRACT YEARS 13 AND 14	97.21%
PPA EAF BONUS THRESHOLD	91.0%
PPA BONUS EAF FACTOR (Truncated to 0.1%)	6.2%
PPA BONUS IN UNCORRECTED DOLLARS (\$1987)	\$930,000.00
PPA BONUS CORRECTED FORMULA	

Capacity = C	C in cents/kWh =	4.4085
Uncorrected Energy = U	U in cents / kWh = ((fuel equation with 180 MW*EAF as input) * 1.10 + 0.05) =	2.84
Corrected Energy = E	E = U * GNPIPD Adjustment Factor =	4.48
	GNPIPD Current value assumed (on payment date) =	114.352
	GNPIPD adjustment factor = Current value / 1987 1st Qtr value (72.465) =	1.5780
	(C + U) / (C + E) =	0.815430145

PPA BONUS PAYMENT CORRECTED	((C + U) / (C + E)) * GNPIPD adjustment factor * Uncorrected Bonus	\$1,198,678.36
EAF BONUS	CONTRACT YEARS 13 AND 14 Payable November, 2006	\$1,198,678.36

Assumption of forced outage rate for Contract Year 15 = 1.0 percent

Month	Potential kWh	Available kWh	Monthly Percentage	Contract Year Cumulative Percentage
Contract Year 15				
Oct-06	133,920,000	128,955,565	96.29%	96.29%
Nov-06	129,600,000	129,164,620	99.66%	97.65%
Dec-06	133,920,000	129,548,813	96.74%	97.54%
Jan-07	133,920,000	132,580,800	99.00%	97.91%
Feb-07	120,960,000	119,750,400	99.00%	98.11%
Mar-07	133,920,000	132,580,800	99.00%	98.26%
Apr-07	129,600,000	128,304,000	99.00%	98.37%
May-07	133,920,000	132,580,800	99.00%	98.45%
Jun-07	129,600,000	128,304,000	99.00%	98.51%
Jul-07	133,920,000	132,580,800	99.00%	98.56%
Aug-07	133,920,000	132,580,800	99.00%	98.60%
Sep-07	129,600,000	128,304,000	99.00%	98.63%
Totals	1,576,800,000	1,555,235,498		98.63%

Notes

1. Actual data used through December 2006.

TWO YEAR RUNNING AVERAGE EAF FOR CONTRACT YEARS 14 AND 15	96.94%
PPA EAF BONUS THRESHOLD	91.0%
PPA BONUS EAF FACTOR (Truncated to 0.1%)	5.9%
PPA BONUS IN UNCORRECTED DOLLARS (\$1987)	\$885,000.00
PPA BONUS CORRECTED FORMULA	

Capacity = C	C in cents/kWh =	4.4095
Uncorrected Energy = U	U in cents / kWh = ((fuel equation with 180 MW*EAF as input) * 1.10 + 0.05) =	2.84
Corrected Energy = E	E = U * GNPIPD Adjustment Factor =	4.60
	GNPIPD Current value assumed (on payment date) =	117.510
	GNPIPD adjustment factor = Current value / 1987 1st Qtr value (72.465) =	1.6216
	(C + U) / (C + E) =	0.804237244

PPA BONUS PAYMENT CORRECTED	((C + U) / (C + E)) * GNPIPD adjustment factor * Uncorrected Bonus	\$1,154,173.74
EAF BONUS	CONTRACT YEARS 14 AND 15 Payable November, 2007	\$1,154,173.74

HPOWER 2007 Operational/Budget Forecasted Expenses 5/21/07 Production Simulation Update

Assumptions:

On-Peak, Weekday Availability	87.00%
Capacity Charge	\$0.0489 /kWh available weekday on-peak
Capacity	46,000 kW
On Peak Energy Rate-1st 644 MWh/day	\$0.1278 /kWh purch
On Peak Energy Rate-Excess MWh/day	\$0.1278 /kWh purch
Off Peak Energy Rate-1st 250 MWh/day	\$0.0971 /kWh purch
Off Peak Energy Rate-Excess MWh/day	\$0.0971 /kWh purch

	On-Peak MWh	Off-Peak MWh	Total MWh	Total Energy	Capacity	Total Expenses
Jan	14,509	10,364	24,873	\$2,860,892	\$520,556.15	\$3,381,449
Feb	14,735	10,525	25,260	\$2,905,405	\$520,556.15	\$3,425,961
Mar	17,369	12,406	29,775	\$3,424,721	\$602,749.22	\$4,027,470
Apr	16,769	11,878	28,747	\$3,306,480	\$575,351.53	\$3,881,831
May	17,369	12,406	29,775	\$3,424,721	\$630,146.92	\$4,054,867
Jun	16,808	12,006	28,814	\$3,314,186	\$575,351.53	\$3,889,538
Jul	13,556	9,683	23,239	\$2,672,950	\$465,760.76	\$3,138,711
Aug	17,369	12,406	29,775	\$3,424,721	\$630,146.92	\$4,054,867
Sep	16,808	12,006	28,814	\$3,314,186	\$547,953.84	\$3,862,140
Oct	17,369	12,406	29,775	\$3,424,721	\$630,146.92	\$4,054,867
Nov	16,808	12,006	28,814	\$3,314,186	\$602,749.22	\$3,916,936
Dec	17,369	12,406	29,775	\$3,424,721	\$575,351.53	\$4,000,072
Total	196,838	140,598	337,436	\$38,811,889	\$6,876,821	

Total Expense \$45,688,709

DATA SOURCES AND NOTES:

Refer to the letter grid across the top of the page for the column address and the line number on the left side for the row number. General reference to a column without reference to a row means to use the data for the corresponding month. Otherwise a specific row reference is in () next to the column designation. Calculation on one sheet of the spreadsheet may draw on data from another sheet. Elements of a formula that reference data from another sheet are preceded by an "A:" if the data are from the SUMMARY sheet and preceded by a "B:" if the data are from the BACKUP sheet.

- On-Peak is defined as the time period between 7:00 AM and 9:00 PM on Monday through Friday.
- Off-Peak is defined as the time period between 9:00 PM on one day and 7:00 AM the next day.
- On-Peak, Weekday Availability in col E(11) is based on HECO projection of HPOWER performance during such periods. Maintenance outages up to 3 weeks per year, do not count against this availability statistic. Only forced outages during the specific weekday, on-peak period count against this v
- Capacity Charge in col E(12) is calculated per the HPOWER PPA, Firm Capacity Amendment, pD-6.
- Capacity in col E(13) is specified in HPOWER PPA, Firm Capacity Amendment, pB-8.
- On-Peak and Off-Peak Energy Rates in cols. E(14), E(15), E(16) and E(17) are described in the HPOWER PPA, Firm Capacity Amendment, Appendix D, pgs D-3 to D-5. Energy rates used are 14.60 cents/kWh on-peak, 11.05 cents/kWh off-peak as adjusted by operation of the contract "discount", pgs D-4 to D-5.
- The On-Peak MWh data in col C and the Off-Peak MWh data in col D are from HECO 2007 Operational/Budget Production Simulation dtd 05/21/20
- The Total MWh in col E is calculated from C + D.
- The Total Energy cost in col F is calculated from B:M + B:R.
- The Capacity cost in col G is calculated from B:H * E(13) * E(12).
- The Total Expenses in col H is calculated from F + G.

HPOWER 2007 Operational/Budget Forecasted Expenses

5/21/07 Production Simulation Update

Assumptions: See SUMMARY sheet

AVAILABILITY DATA						ON-PEAK					OFF-PEAK				
Calendar Days	Number of Weekdays	ON-PEAK Weekday Only				Potential First 644 MWh/Day	Forecasted				Potential First 250 MWh/Day	Forecasted			
		Number On-Peak Hours	Planned Maintenance Hours	Forced Outage Hours	On-Peak Available Hours		First 644 MWh/Day	Excess Over 644 MWh/Day	Excess Over 644 MWh/Day	Energy		First 250 MWh/Day	Excess Over 250 MWh/Day	Excess Over 250 MWh/Day	Energy
31	23	322	56	35	231	16,100	\$1,854,572	0	\$0	\$1,854,572	7,510	\$729,221	2,854	\$277,099	\$1,006,320
28	20	280	14	35	231	16,744	\$1,883,428	0	\$0	\$1,883,428	6,920	\$671,932	3,605	\$350,046	\$1,021,978
31	22	308	0	40	268	19,964	\$2,220,074	0	\$0	\$2,220,074	7,750	\$752,525	4,656	\$452,122	\$1,204,647
30	21	294	0	38	256	19,320	\$2,143,424	0	\$0	\$2,143,424	7,500	\$728,250	4,478	\$434,806	\$1,163,056
31	23	322	0	42	280	19,964	\$2,220,074	0	\$0	\$2,220,074	7,750	\$752,525	4,656	\$452,122	\$1,204,647
30	21	294	0	38	256	19,320	\$2,148,420	0	\$0	\$2,148,420	7,500	\$728,250	4,506	\$437,516	\$1,165,766
31	22	308	70	31	207	14,812	\$1,732,739	0	\$0	\$1,732,739	7,430	\$721,453	2,253	\$218,758	\$940,211
31	23	322	0	42	280	19,964	\$2,220,074	0	\$0	\$2,220,074	7,750	\$752,525	4,656	\$452,122	\$1,204,647
30	20	280	0	36	244	19,320	\$2,148,420	0	\$0	\$2,148,420	7,500	\$728,250	4,506	\$437,516	\$1,165,766
31	23	322	0	42	280	19,964	\$2,220,074	0	\$0	\$2,220,074	7,750	\$752,525	4,656	\$452,122	\$1,204,647
30	22	308	0	40	268	19,320	\$2,148,420	0	\$0	\$2,148,420	7,500	\$728,250	4,506	\$437,516	\$1,165,766
31	21	294	0	38	256	19,964	\$2,220,074	0	\$0	\$2,220,074	7,750	\$752,525	4,656	\$452,122	\$1,204,647
365	261	3,654	140	457	3,057	224,756	\$25,159,791	0	\$0	\$25,159,791	90,610	\$8,796,231	49,988	\$4,853,867	\$13,652,098

DATA SOURCES AND NOTES: See SUMMARY sheet and below

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12. The Number of Weekdays in col D is from the 2007 calendar.
13. The Number of On-Peak Hours (Hrs) in col E is calculated from D * 14.
14. Planned Maintenance Hours in col F is based on the HECO 2007 planned maintenance schedule approved 7/21/06. The schedule consists of 1/20/07 to 1/31/07 for 8 weekdays of 23 MW loss, 2/01/07 to 02/04/07 for 2 weekdays of 23 MW loss. Also from 7/14/07 to 7/29/07 for 10 weekdays of 23 MW loss.
Col. F, January is (4)*(14), February is (1)*(14) and July is (5)*(14). Only those hours during weekdays and on-peak are included.
15. The Forced Outage Hours in col G is calculated from (1 - A:E(11)) * E - F.
16. The On-Peak Available Hours in col H is calculated from E - F - G.
17. The Potential First 644 MWh per Day (46 MW * 14 hr/day) in col I is calculated from 644 * C. However, to account for maintenance, January is calculated as (644 MWh/day)*(19 days)+(23 MW)*(14 hrs/day)*(12 days), Feb. is (644*24)+(23*14*4), and July is (644*15)+(23*14*16).
18. The First 644 MWh per Day cost in col J is calculated from A:E(14) * A:C * 1000 when A:C is less than I, otherwise, from A:E(14) * I * 1000.
19. The Excess Over 644 MWh per Day in col K is calculated from A:C - I when A:C is greater than I, otherwise equals zero.
20. The Excess Over 644 MWh per day cost in col L is calculated from A:E(15) * K * 1000 when K is greater than zero, otherwise, equals zero.
21. The Energy cost in col M is calculated from (A:E(14) * A:C * 1000 when K equals zero, otherwise, is calculated from (A:E(15) * 1000 * K) + (A:E(14) * 1000 * I).
22. The Potential First 250 MWh per Day (25 MW * 10 hr/day) in col N is calc. from 250 * C. However, to account for maintenance, the month of Jan. is calculated (250 MWh/day*19 days)+(23 MW*10 hrs/day*12 days), similarly, for Feb. (250*24)+(23*10*4) and July. (250*15)+(23*10*16).
23. The First 250 MWh per Day cost in col O is calculated from A:E(16) * A:D * 1000 when A:D is less than N, otherwise, is calculated from A:E(16) * N * 1000.
24. The Excess Over 250 MWh per Day in col P is equal to zero when N is greater than A:D, otherwise, is calculated from A:D - N.
25. The Excess Over 250 MWh per Day cost in col Q is calculated from A:E(17) * P * 1000 when P is greater than zero, otherwise, equals zero.
26. The Energy cost in col R is calculated from A:E(16) * 1000 * A:D when P equals zero, otherwise, is calculated from (A:E(17) * 1000 * P) + (A:E(16) * 1000 * N).

Chevron and Tesoro Purchased Power Expenses
June 2007 Update
Assumptions:

On-peak energy payment rate: \$0.1464/kWh
Off-peak energy payment rate: \$0.1108/kWh

Purchased kWh:

Tesoro: 5,304,158 kWh

Chevron: 588,923 kWh

Purchased expense (rounded to dollars):

Tesoro:

On-peak energy expense = $5,304,158 * 14/24 * 0.1464 = \$452,975$

Off-peak energy expense = $5,304,158 * 10/24 * 0.1108 = \$244,875$

Total energy expense = \$697,850

Chevron:

On-peak energy expense = $588,923 * 14/24 * 0.1464 = \$50,294$

Off-peak energy expense = $588,923 * 10/24 * 0.1108 = \$27,188$

Total energy expense = \$77,482

JUNE 2007 UPDATE

Ref: A. Hee, HECO T-9, Customer Service Expense and Energy Cost Adjustment Clause (ECAC).

HECO Response:

CUSTOMER SERVICE EXPENSE

Test year Customer Service Expense increased \$94,000, to \$7,270,000, as shown on page 3. The increase is due to 1) an increase in labor costs associated with the addition of two regular HECO employees into base rates that were previously classified as incremental positions in direct testimony, 2) an increase in non-labor costs associated with the Commercial & Industrial Direct Load Control Program, offset in part by 3) the elimination from base expenses of nonlabor costs associated with the SolarSaver Pilot Program. Further details of this increase were included in the Company's response to CA-IR-122. Test year rate case adjustments related to labor overhead (expense elements 406, 422, and 423) are also being made to the appropriate NARUC accounts.

ENERGY COST ADJUSTMENT CLAUSE (ECAC)

ECAC at present rates increased 0.032 cents per kwh to 7.331 cents per kwh, as shown on page 4, Comparison of Energy Cost Adjustment Factors for June 2007 Update and Direct Testimony. A Comparison of the Composite Cost of Generation – Central Station at present rates and at proposed rates are on pages 5 and 6, respectively. Changes in the fuel prices (\$/mmbtu), BTU mix percent, composite cost of generation (\$/mmbtu) and composite cost of DG energy (\$/kwh) reflect the changes in the fuel prices and the production simulation in Mr. Sakuda's (T-4) update.

A summary of the Comparison of Composite of Purchased Energy for June 2007 Update and Direct Testimony at present and proposed rates is on page 7. Details of the updated fuel expense and kwh purchased are in Mr. Ching's (T-5) update.

A Comparison of Sales Heat Rates for June 2007 Update and Direct Testimony is on page 8. Details of the components in determining the updated Sales Heat Rate (or fixed efficiency factors) are in Mr. Sakuda's (T-4) update.

Updated ECAC exhibits and workpapers are on pages 9 to 32.

HAWAIIAN ELECTRIC COMPANY, INC.
TEST YEAR 2007 (\$1000S)

	<u>BUDGET</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>	<u>ADJUST*</u>	<u>UPDATE</u>
A. Hee						
CUSTOMER SVC EXPENSE						
909 SUPERVISION						
LABOR	282			282		282
NON-LABOR	26			26		26
TOTAL 909	308	0	0	308		308
910 CUSTOMER ASSISTANCE EXP						
LABOR	3,900	(664)		3,236	75	3,311
NON-LABOR	19,320	(16,808)	(24)	2,488	19	2,507
TOTAL 910	23,220	(17,472)	(24)	5,724	94	5,818
911 INFORMATIONAL ADVERTISING EXP						
LABOR	15			15		15
NON-LABOR	1,108			1,108		1,108
TOTAL 911	1,123	0	0	1,123		1,123
912 MISC CUSTOMER SERVICE EXPENSES						
LABOR	0			0		
NON-LABOR	21			21		21
TOTAL 912	21	0	0	21		21
CUSTOMER SERVICE - TOTAL						
LABOR	4,197	(664)	0	3,533	75	3,608
NON-LABOR	20,475	(16,808)	(24)	3,643	19	3,662
TOTAL	24,672	(17,472)	(24)	7,176	94	7,270

* Incorporates Customer Services Expense Adjustment reflected in HECO response to CA-IR-122. Rate Case adjustments relating to GL Code transfers for EEs# 406, 422 and 423 are made to the appropriate end-NARUC account and are presented by other Rate Case witnesses.

Hawaiian Electric Company, Inc.
**Comparison of
Energy Cost Adjustment Factors
June 2007 Update and Direct Testimony**

2007 Test Year - June 2007 Update

(¢/kwh)

Present Rates		
---------------	--	--

<u>June 2007 Update</u>	<u>Direct Testimony</u>	<u>Difference</u>
7.331	7.299	0.032

Proposed Rates		
----------------	--	--

<u>June 2007 Update</u>	<u>Direct Testimony</u>	<u>Difference</u>
0.000	0.000	0.000

HAWAIIAN ELECTRIC COMPANY, INC.
Comparison of
Composite Cost of Generation - Central Station
June 2007 Update and Direct Testimony

2007 Test Year - June 2007 Update
At Present Rates

<u>Line</u>	<u>(A)</u> <u>June 2007</u> <u>Update</u> <u>at Present</u> <u>Rates</u>	<u>(B)</u> <u>Direct</u> <u>Testimony</u> <u>at Present</u> <u>Rates</u>	<u>(C)</u> <u>Difference</u> <u>(A) - (B)</u>
CENTRAL STATION			
<u>FUEL PRICES, ¢/mmBtu</u>			
1 Kahe	1,055.65	1,050.17	5.48
2 Waiau	1,055.65	1,050.17	5.48
3 Honolulu	1,055.65	1,050.17	5.48
4 Diesel	1,707.34	1,698.53	8.81
5 DG	0.00	0.00	0.00
 <u>BTU MIX, %</u>			
6 Kahe	70.01	69.65	0.36
7 Waiau	25.14	25.10	0.04
8 Honolulu	3.56	3.62	-0.06
9 Diesel	0.85	1.17	-0.32
10 DG	0.44	0.46	-0.02
	<u>100.00</u>	<u>100.00</u>	<u>0.00</u>
 11 COMPOSITE COST OF			
GENERATION - CENTRAL			
STATION ¢/mmBtu	<u>1,056.54</u>	<u>1,052.93</u>	<u>3.61</u>

Source:

Col (A) : June 2007 Update HECO-WP-934, p. 3.

Col (B) : Direct Testimony HECO-WP-934, p. 3.

HAWAIIAN ELECTRIC COMPANY, INC.
Comparison of
Composite Cost of Generation - Central Station and DG
June 2007 Update and Direct Testimony

2007 Test Year - June 2007 Update
At Proposed Rates

<u>Line</u>	<u>(A)</u> <u>June 2007</u> <u>Update</u> <u>at</u> <u>Proposed</u> <u>Rates</u>	<u>(B)</u> <u>Direct</u> <u>Testimony</u> <u>at</u> <u>Proposed</u> <u>Rates</u>	<u>(C)</u> <u>Difference</u> <u>(A) - (B)</u>
CENTRAL STATION			
<u>FUEL PRICES, ¢/mmbtu</u>			
1 Kahe	1,055.97	1,050.49	5.48
2 Waiau	1,055.65	1,050.17	5.48
3 Honolulu	1,105.93	1,100.18	5.75
4 Diesel	1,707.34	1,698.53	8.81
5 Other	0.00	0.00	0.00
 <u>BTU MIX, %</u>			
6 Kahe	70.31	69.97	0.34
7 Waiau	25.25	25.22	0.03
8 Honolulu	3.58	3.63	-0.05
9 Diesel	0.86	1.18	-0.32
10 Other	0.00	0.00	0.00
	<u>100.00</u>	<u>100.00</u>	<u>0.00</u>
 11 COMPOSITE COST OF GENERATION - CENTRAL STATION ¢/mmbtu			
	<u>1,063.28</u>	<u>1,059.86</u>	<u>3.42</u>
 DG			
<u>FUEL PRICE, ¢/kwh</u>			
12 COMPOSITE COST OF DG ENERGY ¢/kwh	<u>18.204</u>	<u>18.114</u>	<u>0.090</u>

Source:

Col (A): June 2007 Update HECO-WP-936, p. 2 and p. 5.

Col (B): Direct Testimony HECO-WP-936, p. 2 and p. 5.

HAWAIIAN ELECTRIC COMPANY, INC.
Comparison of
Composite Cost of Purchased Energy
June 2007 Update and Direct Testimony

2007 Test Year - June 2007 Update
At Present and Proposed Rates

<u>Line</u>	<u>(A)</u> <u>June 2007</u> <u>Update</u>	<u>(B)</u> <u>Direct</u> <u>Testimony</u>	<u>(C)</u> <u>Difference</u> <u>(A) - (B)</u>
<u>PAYMENT RATE, ¢/kwh</u>			
1 Kalaeloa	9.920	9.919	0.001
2 AES	2.690	2.671	0.019
3 HPower - On Peak	12.782	12.753	0.029
4 HPower - Off Peak	9.710	9.688	0.022
5 HPower - On Peak-excess	0.000	0.000	0.000
6 HPower - Off Peak-excess	9.710	9.687	0.023
7 Tesoro - On Peak	14.640	14.600	0.040
8 Tesoro - Off Peak	11.080	11.050	0.030
9 Chevron - On Peak	14.640	14.600	0.040
10 Chevron - Off Peak	11.080	11.050	0.030
<u>KWH MIX, %</u>			
11 Kalaeloa	44.17	44.16	0.01
12 AES	45.65	45.65	0.00
13 HPower - On Peak	5.83	5.84	-0.01
14 HPower - Off Peak	2.69	2.69	0.00
15 HPower - On Peak-excess	0.00	0.00	0.00
16 HPower - Off Peak-excess	1.48	1.48	0.00
17 Tesoro - On Peak	0.09	0.09	0.00
18 Tesoro - Off Peak	0.07	0.07	0.00
19 Chevron - On Peak	0.01	0.01	0.00
20 Chevron - Off Peak	0.01	0.01	0.00
	<u>100.00</u>	<u>100.00</u>	<u>0.00</u>
21 COMPOSITE COST OF PURCHASED ENERGY, ¢/kwh	<u>6.783</u>	<u>6.772</u>	<u>0.011</u>

Source:

Col (A): June 2007 Update HECO-WP-934, p. 8.

Col (B): Direct Testimony HECO-WP-934, p. 8.

Hawaiian Electric Company, Inc.

**Comparison of Sales Heat Rates
June 2007 Update and Direct Testimony**

(btu/kwh sales)

	<u>June 2007 Update ¹</u>	<u>Direct Testimony ²</u>	<u>Difference</u>
Central Station with Wind/Hydro	11,209	11,225	-16
LSFO	11,143	11,139	4
Diesel	34,955	32,003	2,952
Wind/Hydro	11,209	11,225	-16

¹ June 2007 Update HECO-WP-936, page 4.² Direct Testimony HECO-WP-936 page 4.

Hawaiian Electric Company, Inc.

**2007 TEST YEAR ENERGY COST ADJUSTMENT FACTORS
JUNE 2007 UPDATE**

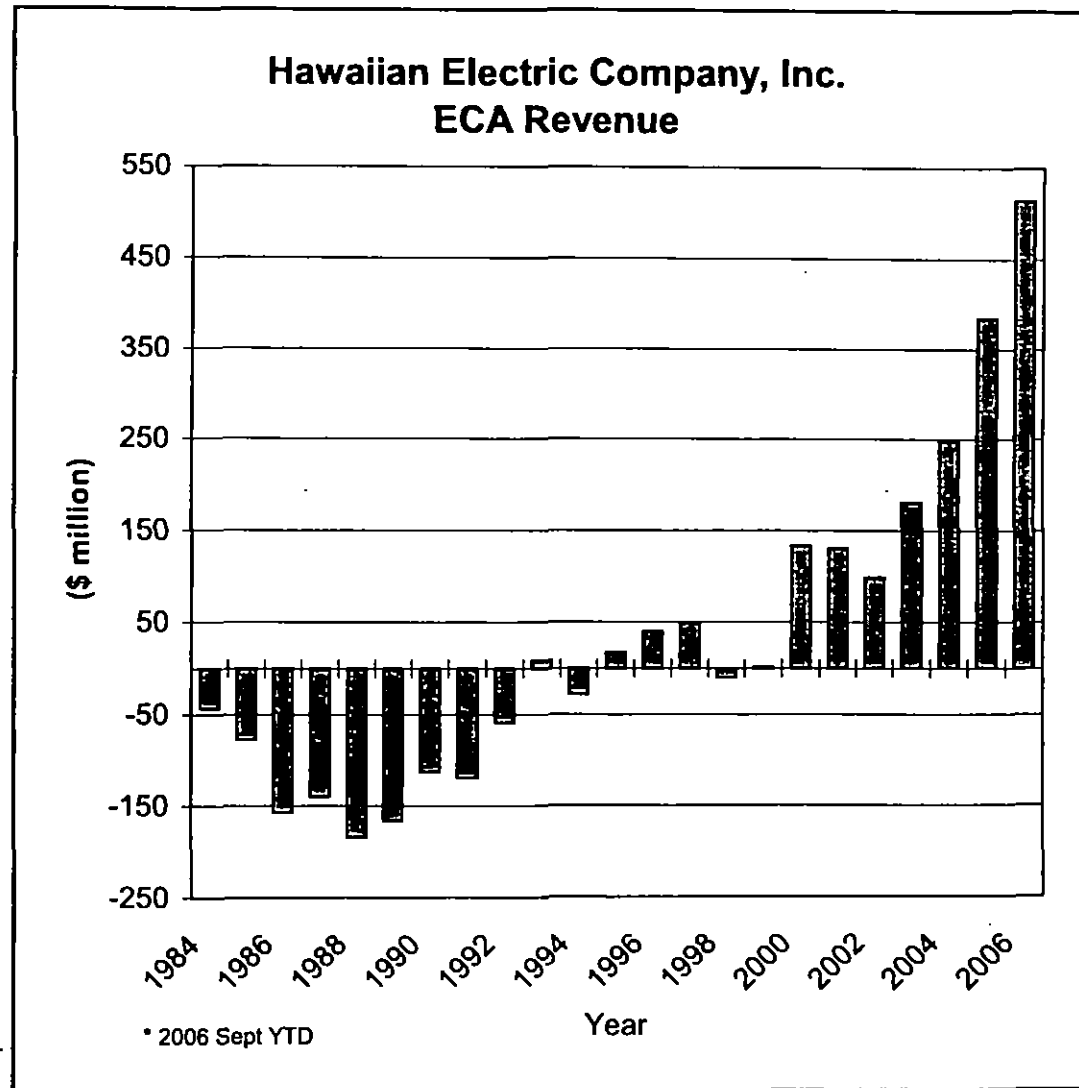
ENERGY COST ADJUSTMENT FACTOR CURRENT EFFECTIVE RATES	ENERGY COST ADJUSTMENT FACTOR PROPOSED RATES
7.331 ¢/KWH	0.000 ¢/KWH

Source: HECO-934, 936

Year	ECA Revenue (\$ million) **
1984	-43.408
1985	-77.146
1986	-157.098
1987	-139.662
1988	-184.172
1989	-166.246
1990	-112.381
1991	-119.346
1992	-58.726
1993	8.951
1994	-28.189
1995	16.882
1996	39.733
1997	48.656
1998	-10.042
1999	1.646
2000	133.240
2001	130.984
2002	98.611
2003	180.738
2004	247.831
2005	384.550
2006	514.875

** Includes Revenue Taxes

Note:
Positive values are collections.
Negative values are returns.



Hawaiian Electric Company, Inc.
ENERGY COST ADJUSTMENT FILING
Present Rates

<u>Line</u>		<u>Line</u>		<u>PURCHASED ENERGY COMPONENT</u>	
		2007 Test Year -		PURCHASED ENERGY PRICE - \$/KWH	
1	Effective Date	June 2007 Update		26	THC - On Peak 14.640
2	Supercedes Factor			27	- Off Peak 11.080
				28	HRRV - On Peak 12.782
				29	- Off Peak 9.710
<u>GENERATION COMPONENT</u>				30	HRRV - On Peak (excess) 0.000
				31	- Off Peak (excess) 9.710
FUEL PRICES, \$/MBTU				32	Chevron - On Peak 14.640
3	Honolulu	1,055.65		33	- Off Peak 11.080
4	Kahe	1,055.65		34	Kalaheo 9.920
5	Walau-Steam	1,055.65		35	AES-HI 2.690
6	Walau-Waste	0.00		<u>PURCHASED ENERGY KWH MIX, %</u>	
7	Walau-Diesel	1,707.34		36	THC - On Peak 0.09
8	DG	0.00		37	- Off Peak 0.07
BTU MIX, %				38	HRRV - On Peak 5.83
9	Honolulu	3.56		39	- Off Peak 2.69
10	Kahe	70.01		40	HRRV - On Peak (excess) 0.00
11	Walau-Steam	25.14		41	- Off Peak (excess) 1.48
12	Walau-Waste	0.00		42	Chevron - On Peak 0.01
13	Walau-Diesel	0.85		43	- Off Peak 0.01
14	DG	0.44		44	Kalaheo 44.17
		100.00		45	AES-HI 45.65
				100.00	
15	COMPOSITE COST OF GENERATION, \$/MBTU	1,056.54		46	COMPOSITE COST OF PURCHASED ENERGY, \$/KWH 6.783
16	% Input to system kWh Mix	58.41		47	% Input to System kWh Mix 41.59
17	Efficiency Factor, Mbtu/kWh	0.011170		48	WTD CMP PURCH ENRGY COST, \$/KWH (Line 46 x 47) 2.82105
18	WEIGHTED COMPOSITE GEN COST, \$/KWH (Line 15 x 16 x 17)	6.89329			
19	BASE GENERATION COST, \$/Mbtu	287.83		49	BASE PURCH ENERGY COMP COST 3.005
20	Base % Input to System kWh Mix	58.64		50	Base % Input to System kWh Mix 41.36
21	Efficiency Factor, Mbtu/kWh	0.011170		51	WTD BASE PRCH ENERGY COST, \$/KWH (Line 49 x 50) 1.24287
22	WEIGHTED BASE GEN COST, \$/KWH (Line 19 x 20 x 21)	1.88531			
23	Cost Less Base (Line 18 - 22)	5.00798		52	Cost Less Base (Line 48 - 51) 1.57818
24	Revenue Tax Req Multiplier	1.0975		53	Loss Factor 1.059
25	GENERATION FACTOR, \$/KWH (Line 23 x 24)	5.49626		54	Revenue Tax Req Multiplier 1.0975
				55	PURCHASED ENERGY FACTOR, \$/KWH (Line 52 x 53 x 54) 1.83424
<u>Line</u>					
56	Fuel & Purchased Energy Factor, \$/kWh (Line 25 + 55)			7.33050	
57	Adjustment, \$/kWh			0.000	
58	ECA Reconciliation Adjustment, \$/kWh			0.000	
59	ENERGY COST ADJUSTMENT FACTOR, \$/KWH (Line 56 + 57 + 58)			7.331	

Reference: HECO-WP-934

HAWAIIAN ELECTRIC COMPANY, INC.
Comparison of
Composite Cost of Generation - Central Station
Present Rates and Proposed Rates
2007 Test Year - June 2007 Update

<u>Line</u>	(A) At Present Rates	(B) At Proposed Rates	(C) Difference (B) - (A)
<u>FUEL PRICES, ¢/mmbtu</u>			
1 Kahe	1,055.65	1,055.97	0.32
2 Waiau	1,055.65	1,055.65	0.00
3 Honolulu	1,055.65	1,105.93	50.28
4 Diesel	1,707.34	1,707.34	0.00
5 DG	0.00		0.00
6 Other		0.00	0.00
<u>BTU MIX, %</u>			
7 Kahe	70.01	70.31	0.30
8 Waiau	25.14	25.25	0.11
9 Honolulu	3.56	3.58	0.02
10 Diesel	0.85	0.86	0.01
11 DG	0.44		-0.44
12 Other		0.00	0.00
	<u>100.00</u>	<u>100.00</u>	<u>0.00</u>
13 COMPOSITE COST OF GENERATION ¢/mmbtu	<u>1,056.54</u>	<u>1,063.28</u>	<u>6.74</u>

Source:

Col (A): HECO-WP-934, p. 3

Col (B): HECO-WP-936, p. 2

HAWAIIAN ELECTRIC COMPANY, INC.
ENERGY COST ADJUSTMENT (ECA) FILING
Proposed Rates

ENERGY COST ADJUSTMENT (ECA) FILING - 2007 Test Year - June 2007 Update (page 1 of 2)

Line
1 Effective Date 2007 Test Year - June 2007 Update
2 Supersedes Factors of

GENERATION COMPONENTCENTRAL STATION

FUEL PRICES, \$/mmbtu

3 Honolulu	1,105.93
4 Kahe	1,055.97
5 Waiiau-Steam	1,055.65
6 Waiiau-Diesel	1,707.34
7 Other	0.00

BTU MIX, %

8 Honolulu	3.58
9 Kahe	70.31
10 Waiiau-Steam	25.25
11 Waiiau-Diesel	0.86
12 Other	0.00
	100.00

13 COMPOSITE COST OF GENERATION, CNTRL STN + OTHER \$/mmbtu	1,063.28
14 % Input to System kWh Mix	58.15

EFFICIENCY FACTOR, mmbtu/kWh

	(A)	(B)	(C)	(D)
	Eff Factor	Percent of	Centrl Stn +	Weighted
			Other	Eff Factor
15 LSFO	0.011143	99.73		0.011113
16 Diesel	0.034955	0.27		0.000096
17 Other	0.011209	0.00		0.000000

(Lines 15, 16, 17): Col(B) x Col(C) = Col(D)

18 Weighted Efficiency Factor, mmbtu/kWh (lines 15(D) + 16(D) + 17(D))	0.011209
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19 WGTD. COMPOSITE CNTRL STN + OTHER GEN COST, \$/kWh (lines (13x14x18))	6.93049
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20 BASE CNTRL STN + OTHER GEN. COST, \$/mmbtu	1,063.28
21 Base % Input to Sys kWh Mix	58.15
22 Efficiency Factor, mmbtu/kWh	0.011209
23 WEIGHTED BASE CNTRL STN + OTHER GEN COST \$/kWh (lines (20x21x22))	6.93049

24 COST LESS BASE (line(19-23))	0.00000
25 Revenue Tax Req Multiplier	1.0975
26 CNTRL STN + OTHER GENERATION FACTOR, \$/kWh (line (24x25))	0.00000

DG ENERGY COMPONENT

27 COMPOSITE COST OF DG ENERGY, \$/kWh	18.204
28 % Input to System kWh Mix	0.27
29 WTD COMP DG ENRGY COST, \$/kWh (Lines 27 x 28)	0.04915
30 BASE DG ENERGY COMP COST	18.204
31 Base % Input to System kWh Mix	0.27
32 WTD BASE DG ENERGY COST, \$/kWh (Line 30 x 31)	0.04915
33 Cost Less Base (Line 29 - 32)	0.00000
34 Loss Factor	1.051
35 Revenue Tax Req Multiplier	1.0975
36 DG FACTOR, \$/kWh (Line 33 x 34 x 35)	0.00000

SUMMARY OF
TOTAL GENERATION FACTOR, \$/kWh

37 Cntrl Stn+Other (line 26)	0.00000
38 DG (line 36)	0.00000
39 TOTAL GENERATION FACTOR, \$/kWh (lines 37 + 38)	0.00000

HAWAIIAN ELECTRIC COMPANY, INC.
ENERGY COST ADJUSTMENT (ECA) FILING
Proposed Rates

ENERGY COST ADJUSTMENT (ECA) FILING - 2007 Test Year - June 2007 Update (page 2 of 2)

Line PURCHASED ENERGY COMPONENT

PURCHASED ENERGY PRICE, \$/kWh			
40	THC	- On Peak	14.640
41		- Off Peak	11.080
42	HRRV	- On Peak	12.782
43		- Off Peak	9.710
44	HRRV	- On Peak (excess)	0.000
45		- Off Peak (excess)	9.710
46	Chevron	- On Peak	14.640
47		- Off Peak	11.080
48	Kalahele		9.920
49	AES-HI		2.690

PURCHASED ENERGY KWH MIX, %			
50	THC	- On Peak	0.09
51		- Off Peak	0.07
52	HRRV	- On Peak	5.83
53		- Off Peak	2.69
54	HRRV	- On Peak (excess)	0.00
55		- Off Peak (excess)	1.48
56	Chevron	- On Peak	0.01
57		- Off Peak	0.01
58	Kalahele		44.17
59	AES-HI		45.65
			<u>100.00</u>

60	COMPOSITE COST OF PURCHASED ENERGY, \$/kWh			6.783
61	% Input to System kWh Mix			41.58
62	WEIGHTED COMP. PURCH. ENERGY COST, \$/kWh (lines (60x61))			2.82037
63	BASE PURCHASED ENERGY COMPOSITE COST, \$/kWh			6.783
64	Base % Input to Sys kWh Mix			41.58
65	WEIGHTED BASE PURCH ENERGY COST, \$/kWh (lines (63 x 64))			2.82037
66	COST LESS BASE (lines (62 - 65))			0.00000
67	Loss Factor			1.051
68	Revenue Tax Req Multiplier			1.0975
69	PURCHSD ENERGY FCTR, \$/kWh (lines (66 x 67 x 68))			0.00000

Line SYSTEM COMPOSITE

70	GEN AND PURCHASED ENERGY FACTOR, \$/kWh (lines (39 + 69))			0.00000
71	Adjustment, \$/kWh			0.000
72	ECA Reconciliation Adjustment			0.000
73	ECA FACTOR, \$/kWh (lines (70 + 71 + 72))			0.000

Reference: HECO-WP-936, HECO-937

Hawaiian Electric Company, Inc.
WEIGHTED COMPOSITE GENERATION COST CALCULATIONS CENTRAL
STATION AND OTHER
2007 Test Year - June 2007 Update
At Proposed Rates

	<u>LSFO</u>	<u>Diesel</u>	<u>Other</u>	<u>Total</u>	<u>units</u>
1 Fixed Efficiency Factor	0.011143	0.034955	0.011209		mbtu/kwh
2 Gen Mwh %	99.73	0.27	0.00	100.00	%
round		0.000001			
3 Weighted Efficiency Factor (line 1 x line 2)	0.011113	0.000096	0.000000	0.011209	mbtu/kwh

Reference:

- 1 HECO-WP-936, page 4.
- 2 HECO-WP-936, page 3.

Hawaiian Electric Company, Inc.
Fuel Price for ECAC Calculations

2007 Test Year - June 2007 Update

Description	(A)	(B)	(C) Central Station	(D)	(E)	(F) DG
	<u>Kahe</u>	<u>Waiau</u>	<u>Honolulu</u>	<u>Diesel</u>	<u>Total</u>	<u>Diesel</u>
1 MBtu Consumed	35,380,212	12,708,603	1,801,590	431,808	50,322,213	223,030
2 Fuel Price (\$/bbl)	65.4412	65.4412	65.4412	99.9771		99.9771
3 Trucking cost per bbl	0.0000	0.0000	3.1170	0.0000		4.4100
4 Inspection Cost per bbl	0.0092	0.0092	0.0092	0.0730		0.0730
5 Fuel Additive Cost per bbl	0.0198	0.0000	0.0000	0.0000		0.0000
6 Heat Content (MBtu/bbl)	6.2	6.2	6.2	5.86		5.86
<u>Fuel Price at Present Rates</u>						
7 Fuel Price (\$/bbl)						
8 Fuel Oil	65.4412	65.4412	65.4412	99.9771		0.0000
9 Trucking	0.0000	0.0000	0.0000	0.0000		0.0000
10 Inspection	0.0092	0.0092	0.0092	0.0730		0.0000
11 Fuel Additive	<u>0.0000</u>	<u>0.0000</u>	<u>0.0000</u>	<u>0.0000</u>		<u>0.0000</u>
12 Fuel Price (\$/bbl)	65.4504	65.4504	65.4504	100.0501		0.0000
13 Fuel Price per MBtu (\$/MBtu)	1,055.65	1,055.65	1,055.65	1,707.34		0.00
<u>Fuel Price at Proposed Rates</u>						
14 Fuel Price (\$/bbl)						
15 Fuel Oil	65.4412	65.4412	65.4412	99.9771		99.9771
16 Trucking	0.0000	0.0000	3.1170	0.0000		4.4100
17 Inspection	0.0092	0.0092	0.0092	0.0730		0.0730
18 Fuel Additive	<u>0.0198</u>	<u>0.0000</u>	<u>0.0000</u>	<u>0.0000</u>		<u>0.0000</u>
19 Fuel Price (\$/bbl)	65.4702	65.4504	68.5674	100.0501		104.4601
20 Fuel Price per MBtu (\$/MBtu)	1,055.97	1,055.65	1,105.93	1,707.34		1,782.60

Line 1: HECO-409, page 2

Line 2: HECO-404, pg 1, col B

Line 3: HECO-405, pg 2, col B

Line 4: HECO-405, pg 3, col B

Line 5: Additive \$/bbl calculations:

$$\text{Additive Expense}^{(1)} + \text{Kahe bbls consumed}^{(2)} \\ \$113,000 + 5,706,486 \text{ bbls} = 0.0198$$

⁽¹⁾ HECO-405, pg 1, line 4⁽²⁾ HECO-404, pg 1, line 2

Hawaiian Electric Company, Inc.
Determination of Percent of Generation MBTU Mix

2007 Test Year - June 2007 Update
At Present Rates

<u>Line</u>	<u>Generation</u>	(A) <u>MBTU</u>	(B) <u>% to Total Generation</u>	<u>Reference</u>
1	Kahe	35,380,212	70.01	HECO-409 page 2
2	Waiau	12,708,603	25.14	HECO-409 page 2
3	Honolulu	1,801,590	3.56	HECO-409 page 2
4	Diesel	431,808	0.85	HECO-409 page 2
5	DG	223,030	0.44	HECO-409 page 2
6	Total	50,545,243	100.00	HECO-409 page 2

Reference: HECO-WP-934, p.1

HAWAIIAN ELECTRIC COMPANY, INC.
Composite Cost of Generation**2007 Test Year - June 2007 Update**
At Present Rates

<u>Line</u>	<u>GENERATION COMPONENT</u>
<u>FUEL PRICES, ¢/mmbtu</u>	
1	Kahe 1,055.65
2	Waiau 1,055.65
3	Honolulu 1,055.65
4	Diesel 1,707.34
5	DG 0.00
<u>BTU MIX, %</u>	
6	Kahe 70.01
7	Waiau 25.14
8	Honolulu 3.56
9	Diesel 0.85
10	DG 0.44
	<u>100.00</u>
11	COMPOSITE COST OF GENERATION, ¢/mmbtu 1,056.54

Line 11: (Line 1x6 + line 2x7 + line 3x8 + line 4x9 + line 5x10)

Reference:

HECO-WP-934, p. 1, line 13
HECO-WP-934, p. 2

Hawaiian Electric Company, Inc.
Net System Percent Mix**2007 Test Year - June 2007 Update**
At Present Rates

<u>Line</u>	(A) 2007 Norm Energy (Mwh)	(B) % to Total System	<u>Reference</u>
<u>Generation (Mwh)</u>			
1 Kahe	3,464,015		HECO-409 page 2
2 Waiau	1,098,623		HECO-409 page 2
3 Honolulu	141,293		HECO-409 page 2
4 Diesel	12,971		HECO-409 page 2
5 DG	<u>21,840</u>		HECO-409 page 2
6 Total Generation	<u>4,738,742</u>	58.41	HECO-409 page 2
<u>Purchased Power (Mwh)</u>			
7 AES Hawaii, Inc.	1,539,910		HECO-409 page 3
8 Kalaeloa Partners	1,490,246		HECO-409 page 4
9 HPower	337,436		HECO-409 page 5
10 Tesoro	5,304		HECO-RWP-R504
11 Chevron	<u>589</u>		HECO-RWP-R504
12 Total Purchased Power	<u>3,373,485</u>	<u>41.59</u>	HECO-403, line 6
13 Total Net System	<u><u>8,112,227</u></u>	<u><u>100.00</u></u>	

Hawaiian Electric Company, Inc.
Avoided Energy Cost Payment Rates and Schedule Q

2007 Test Year - June 2007 Update
At Proposed Rates

<u>Avoided Energy Rate - over 100 kW</u>		<u>Source</u>
On-Peak	14.64 ¢/Net Kwh	HECO-WP-934, p. 6
Off-Peak	11.08 ¢/Net Kwh	HECO-WP-934, p. 6.

Schedule Q Payment Rates - Under 100kW

Payment Rate	12.97 ¢/Net Kwh	HECO-WP-934, p. 7.
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Hawaiian Electric Company, Inc.

DERIVATION OF
AVOIDED ENERGY COST PAYMENT RATES
Avoided Energy Rate - over 100 KW2007 Test Year - June 2007 Update
At Proposed Rates

<u>Line</u>	<u>ON-PEAK</u>	<u>OFF-PEAK</u>	<u>SOURCE</u>
1 Heat Rate	13,382 BTU / NET KWH	9,929 BTU / NET KWH	Docket #4569, HECO-101 Test Year 2007 Composite Fuel Cost.
2 Composite Fuel Cost of Total Generation (Centrl Stn & DG)	1,066.45 ¢ / MMBTU	1,066.45 ¢ / MMBTU	
3 1 MMBTU / 1,000,000 BTU	1,000,000 BTU / MMBTU	1,000,000 BTU / MMBTU	
4 Unadjusted Payment Rate (line 1 x 2) / line 3	14.27 ¢ / NET KWH	10.59 ¢ / NET KWH	
5 O&M Adjustment	<u>0.37</u> ¢ / NET KWH	<u>0.49</u> ¢ / NET KWH	Appendix A, D&O 8298
BASE Avoided Energy 6 Payment Rate	<u>14.64</u> ¢ / NET KWH	<u>11.08</u> ¢ / NET KWH	

Reference: Line 2: HECO-WP-936, pg. 7, line 7.

Hawaiian Electric Company, Inc.

DERIVATION OF
SCHEDULE "Q" PAYMENT RATES
Schedule "Q" Rate - Under 100 KW2007 Test Year - June 2007 Update
At Proposed Rates

Line	ON-PEAK	OFF-PEAK	SOURCE
1 Heat Rate	13.382 BTU / NET KWH	9,929 BTU / NET KWH	Docket #7766
Composite Fuel Cost of Total			Test Year 2007
2 Generation (Centrl Stn & DG)	1,066.45 ¢ / MMBTU	1,066.45 ¢ / MMBTU	Composite Fuel Cost.
3 1 MMBTU / 1,000,000 BTU	1,000,000 BTU / MMBTU	1,000,000 BTU / MMBTU	
4 Unadjusted Payment Rate (line 1 x 2) / line 3	14.27 ¢ / NET KWH	10.59 ¢ / NET KWH	
5 Power Factor Adjustment	-0.12 ¢ / NET KWH	-0.28 ¢ / NET KWH	Appendix A, D&O 8298
6 O&M Adjustment	0.37 ¢ / NET KWH	0.49 ¢ / NET KWH	Appendix A, D&O 8298
Pre Time-Weighted "Q" Payment			
7 Rate (line 4 + line 5 + line 6)	14.52 ¢ / NET KWH	10.80 ¢ / NET KWH	
8 Hour Weighting	x 14/24 HOURS / HOURS	x 10/24 HOURS / HOURS	
Time-weighted Peak Time-Related Schedule "Q" Energy Payment			
9 Rate (line 7 x 8)	8.47 ¢ / NET KWH	4.50 ¢ / NET KWH	
10 Time-Weighted "Q" ON PEAK Payment Rate	8.47 ¢ / NET KWH		
11 Time-Weighted "Q" OFF PEAK Payment Rate		4.50 ¢ / NET KWH	
Schedule "Q" Energy Payment			
12 Rate (line 10 + line 11)	12.97 ¢ / NET KWH		
13 Base 1996 Schedule "Q" Energy Payment	3.67 ¢ / NET KWH		Filed January 1, 1996
Difference Between 2007 Test Year Update and Base Sch "Q" Rates (line 12 - line 13)	9.30 ¢ / NET KWH		

Reference: Line 2: HECO-WP-936, pg. 7, line 7.

Hawaiian Electric Company, Inc.
Determination of Percent of Purchased Energy Mix,
Payment Rate (in ¢/kwh) and
Composite Cost of Purchased Energy (in ¢/kwh)

2007 Test Year - June 2007 Update
At Present and Proposed Rates

No.	(A) Producer	(B)	(C)	(D)	(E)	(F)
		Gwh Purchased	% to Total PP	Payment Rate (¢/kwh)	Weighted Cost (¢/kwh) [(colF + colB) * colC * 1000]	Purch Fuel Expense (\$ thous)
1	Kalaeloa					
	Fuel	1,490.2	44.17	9.760		145,448.6
	Additive			<u>0.160</u>		<u>2,386.4</u>
	Total	1,490.2		<u>9.920</u>	4.382	147,835.0
2	AES					
	Fuel	1,539.9	45.65	2.690	1.228	41,417.5
3	HPower					
	On Peak	196.8	5.83	12.782	0.745	25,159.8
	Off Peak	90.6	2.69	9.710	0.261	8,798.2
	On Peak - excess	0.0	0.00	0.000	0.000	0.0
	Off Peak - excess	<u>50.0</u>	1.48	9.710	0.144	<u>4,853.9</u>
	Total	337.4				38,811.9
4	Tesoro					
	On Peak	3.1	0.09	14.640	0.013	453.0
	Off Peak	<u>2.2</u>	0.07	11.080	0.008	<u>244.9</u>
	Total	5.3				697.9
5	Chevron					
	On Peak	0.4	0.01	14.640	0.001	50.3
	Off Peak	<u>0.2</u>	0.01	11.080	0.001	<u>27.2</u>
	Total	0.6				77.5
6	Other	-	-	0.000	0.000	-
7	Total	3,373.5	100.00		6.783	228,839.8
8	Composite Cost of Purchased Energy					6.783 ¢/kwh

Line 1: HECO-WP-501, pg. 1
 Line 2: HECO-WP-503, pg. 1
 Line 3: HECO-WP-504, pg. 2
 Lines 4&5: HECO-504
 Line 7, col B: HECO-403, line 6

Hawaiian Electric Company, Inc.
Determination of Percent of Central Station Generation MBTU Mix

2007 Test Year - June 2007 Update
At Proposed Rates

<u>Line</u>	<u>Central Station Plant</u>	(A) <u>MBTU</u>	(B) <u>% to Total Generation</u>	<u>Reference</u>
1	Kahe	35,380,212	70.31	HECO-409 page 2
2	Waiau	12,708,603	25.25	HECO-409 page 2
3	Honolulu	1,801,590	3.58	HECO-409 page 2
4	LSFO total	49,890,405	99.14	
5	Diesel	431,808	0.86	HECO-409 page 2
6	Total	50,322,213	100.00	HECO-409 page 2

HAWAIIAN ELECTRIC COMPANY, INC.
Composite Cost of Central Station Generation**2007 Test Year - June 2007 Update**
At Proposed RatesLine GENERATION COMPONENT
Central Station and OtherFUEL PRICES, ¢/mmbtu

1	Kahe	1,055.97
2	Waiau	1,055.65
3	Honolulu	1,105.93
4	Diesel	1,707.34
5	Other	0.00

BTU MIX, %

6	Kahe	70.31
7	Waiau	25.25
8	Honolulu	3.58
9	Diesel	0.86
10	Other	0.00
		<u>100.00</u>

11	COMPOSITE COST OF GENERATION,	
	Central Stn + Other ¢/mmbtu	1,063.28

Line 11: (Line 1x6 + line 2x7 + line 3x8 + line 4x9 + line 5x10)

Reference:

HECO-WP-934, p. 1, line 20
HECO-WP-936, p. 1

Hawaiian Electric Company, Inc.
Percent of Central Station LSFO and Diesel Kwh Mix

**2007 Test Year - June 2007 Update
At Proposed Rates**

<u>Line</u>		(A) 2007 Norm Energy (Mwh)	(B) Percent of Central Stn Generation	<u>Reference</u>
1	Kahe	3,464,015		HECO-409 page 2
2	Waiiau	1,098,623		HECO-409 page 2
3	Honolulu	141,293		HECO-409 page 2
4	LSFO Total	4,703,931	99.73	
5	Diesel	12,971	0.27	HECO-409 page 2
6	Total	4,716,902	100.00	HECO-409 page 2

Hawaiian Electric Company, Inc.
Determination of Fixed Efficiency Factor or Sales Heat Rate (Mbtu / Kwh Sales)
2007 Test Year - June 2007 Update
At Proposed Rates

<u>Line</u>		<u>Reference</u>
<u>Total Central Station Fuel Sales Heat Rate</u>		
1	Total Central Station Fuel Consumed 50,322,213 Mbtu	HECO-409 page 2
2	Sales 7,720.8 Gwh	HECO-403, line 1
3	% of Central Stn to Total System 58.15 Percent	HECO-403, line 7a
4	Kwh/Gwh Conversion 1,000,000 kwh/gwh	
5	Sales Heat Rate [(line 1 + (line 2 x line 3 x line 4))	0.011209 Mbtu/Kwh Sales
<u>LSFO Sales Heat Rate</u>		
6	LSFO Fuel Consumed 49,890,405 Mbtu	HECO-409 page 2
7	Sales 7,720.8 Gwh	HECO-403, line 1
8	% of LSFO Fuel Generation to Total System 57.99 Percent	HECO-936 page 8
9	Kwh/Gwh Conversion 1,000,000 kwh/gwh	
10	Sales Heat Rate [(line 6 + (line 7 x line 8 x line 9))	0.011143 Mbtu/Kwh Sales
<u>Diesel Fuel Sales Heat Rate</u>		
11	Diesel Fuel Consumed 431,808 Mbtu	HECO-409 page 2
12	Sales 7,720.8 Gwh	HECO-403, line 1
13	% of Diesel Fuel Generation to Total System 0.16 Percent	HECO-936 page 8
14	Kwh/Gwh Conversion 1,000,000 kwh/gwh	
15	Sales Heat Rate [(line 11 + (line 12 x line 13 x line 14))	0.034955 Mbtu/Kwh Sales
<u>HECO Other Sales Heat Rate</u>		
16	Total Central Station Fuel Consumed 50,322,213 Mbtu	
17	Sales 7,720.8 Gwh	
18	% of Central Stn to Total System 58.15 Percent	
19	Kwh/Gwh Conversion 1,000,000 kwh/gwh	
20	Sales Heat Rate [(line 16 + (line 17 x line 18 x line 19))	0.011209 Mbtu/Kwh Sales

Hawaiian Electric Company, Inc.
Determination of Composite Cost of DG Energy

**2007 Test Year - June 2007 Update
At Proposed Rates**

	(A)	(B)	(C)	(D)	(E) (colD + colC x 100)	(F) (colD + colB x 100)
			Fuel			
Line	DG Unit Location	Net to System (Kwh)	Consumed (Mbtu)	Fuel Expense (\$)	Fuel Cost (\$/mbtu)	Fuel Cost (\$/kwh)
1	Substation DG	21,840,000	223,030	3,975,733	1782.60	18.204
2					0.00	0.000
3					0.00	0.000
4					0.00	0.000
5	Total	21,840,000	223,030	3,975,733	1782.60	18.204

6	Composite DG Fuel Cost	1782.60 \$/mbtu
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7	Composite Cost of DG Energy	18.204 \$/kwh
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Col B: HECO-409 page 2
Col C: HECO-409 page 2
Col D: HECO-404 page 2

Hawallan Electric Company, Inc.
Determination of Central Station and DG Percent to Total Generation Mbtu Mix

2007 Test Year - June 2007 Update
At Proposed Rates

	(A) 2007 Mbtu Consumed	(B) % to Total Mbtu Consumed	Reference
1 Central Station Generation	50,322,213	99.56	HECO-409 page 2
2 DG	223,030	0.44	HECO-409 page 2
3 Total Generation	<u>50,545,243</u>	<u>100.00</u>	

Hawaiian Electric Company, Inc.
Determination of Composite Cost of Total (Central Station and DG) Generation
For Avoided Cost Calculation Purposes

**2007 Test Year - June 2007 Update
At Proposed Rates**

<u>Line</u>	<u>CENTRAL STATION ENERGY COMPONENT</u>	<u>Line</u>	<u>DG ENERGY COMPONENT</u>
1	Composite Cost of Centr'l Stn Gen. 1063.28 ¢/Mbtu	4	Composite Cost of DG Generation 1782.60 ¢/Mbtu
2	Percent of Centr'l Stn Gen. Btu Mix 99.56 %	5	Percent of DG Gen. Btu Mix (100 - line 3) 0.44 %
3	Weighted Composite Cost of Central Station (line 1 x line 2) 1058.6016 ¢/Mbtu	6	Weighted Composite Cost of DG (line 4 x line 5) 7.8434 ¢/Mbtu
	<u>Line Total Generation Composite Cost</u>		
	Composite Cost of Central Station and DG		
	7 (line 3 + line 6)		1066.45 ¢/Mbtu

Line 1: HECO-WP-936 page 2, line 11
Line 2: HECO-WP-936 page 6, line 1 col.(B)
Line 4: HECO-WP-936 page 5, line 6
Line 5: HECO-WP-936 page 6, line 2 col.(B)

Hawaiian Electric Company, Inc.
Net System Percent Mix**2007 Test Year - June 2007 Update**
At Proposed Rates

	(A) 2007 Norm Energy (Gwh)	(B) % to Total System	Reference
<u>Central Station Generation</u>			
LSFO	4,704.7	57.99	
Diesel	13.0	0.16	
12 Tot Central Station Generation	4,717.7	58.15	HECO-403, line 7a
13 DG	21.8	0.27	HECO-403, line 7b
14 Purchase Power	3,373.5	41.58	HECO-403, line 6
15 Total Net System	8,113.0	100.00	HECO-403, line 5

Hawaiian Electric Company, Inc.
DG and Purchased Energy Loss Factor Calculations

2007 Test Year - June 2007 Update
At Proposed Rates

<u>Line</u>		<u>Reference</u>
1	Net to System (gwh) 8,113.0	HECO-403, line 5
2	Sales (gwh) 7,720.8	HECO-403, line 1
3	DG & Purchase Power Loss Factor 1.051	Line 1 + Line 2

JUNE 2007 UPDATE

Ref: Russell R. Harris: Insurance as included in Administrative and General Expenses

Due to the delay of the initiation of the HR Suite program until after the 2007 test year, there is a reduction of \$1,000 in the costs allocated to NARUC 925.01 (see page 2). This update eliminates all costs associated with the HR Suite program and is in concert with the updates submitted by Ms. Patsy Nanbu in HECO T-10. The HR Suite project and allocation is explained by Ms. Julie Price in HECO T-12.

HAWAIIAN ELECTRIC COMPANY, INC.
TEST YEAR 2007 (\$1000S)

	<u>BUDGET</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>	<u>ADJUST</u>	<u>UPDATE</u>
R. Harris						
INSURANCE EXPENSE						
INSURANCE						
924 PROPERTY INSURANCE						
LABOR	199			199		199
NON-LABOR	2,740			2,740		2,740
TOTAL 924	<u>2,939</u>	<u>0</u>	<u>0</u>	<u>2,939</u>		<u>2,939</u>
925 INJURIES & DAMAGES						
LABOR	1,375			1,375		1,375
NON-LABOR	5,506	(19)	(61)	5,426	(1)	5,425
TOTAL 925	<u>6,881</u>	<u>(19)</u>	<u>(61)</u>	<u>6,801</u>	<u>(1)</u>	<u>6,800</u>
TOTAL INSURANCE	<u>9,820</u>	<u>(19)</u>	<u>(61) #</u>	<u>9,740</u>	<u>(1) 0</u>	<u>9,739</u>

JUNE 2007 UPDATE

Ref: Julie K. Price, HECO T-12, A&G Expenses – Employee Benefits

Employee benefit expenses in Account No. 926000 and Account No. 926010 for the test year were updated to reflect the following and are included in Exhibit 1:

- Qualified Pension Plan and Other Postretirement Benefits were updated to reflect final 2007 expenses as provided by Watson Wyatt Worldwide. See Exhibit 2.

Pension Plan expense as updated includes:

Net periodic pension cost	\$17,710,000 (Exb. 2, page 1)
Amortization of prepaid pension asset	<u>\$ 5,055,000</u> (HECO T-10 June Update)
Total update expense	\$22,765,000

Other Postretirement Benefits expense as updated includes:

Net periodic postretirement benefit cost	\$6,291,000 (Exb. 2, page 2)
Amortization of regulatory asset	\$1,302,000 (HECO T-12, page 18)
Electric discount for retirees	\$ (408,000) (HECO T-12, page 17)
Adjustment to delete life insurance for senior management	<u>\$ (835,000)</u> (Exb. 2, page 2)
Total updated expense	\$6,350,000

- Deletion of amortization amount for HR Suite project based on response to CA-IR-295.
- Update long term disability, flex plan credits less prices, medical, dental, vision and life insurance premiums per response to CA-IR-298.

HAWAIIAN ELECTRIC COMPANY, INC.
ADMINISTRATIVE AND GENERAL EXPENSES - Employee Benefits
(\$1000s)

		HECO-1201					
Line	Account Description	(a)	(b)	(c)	(d)	(e)	(f)
		Budget 2007	Adj	Normali- zations	TY Est. 2007	June Update	Revised TY Est. 2007
	926000 Employee Pensions and Benefits						
1	Qualified Pension Plan	17,802	227 ¹		18,029	4,737 a	22,766
2	Non-Qualified Pension Plans	340	-340 ²		0	0	0
3	Other Postretirement Benefits	8,170	-705 ^{1 3}		7,465	-1,115 a	6,350
4	Long-Term Disability Benefits	517	-3 ¹		514	-3 b	511
5	Other Benefits/Administration	431	364 ^{1 2}	-19 ³	776	-5 c	771
6	Subtotals: Non-Labor	27,260	-457	-19	26,784	3,614	30,398
7	Labor	604	0		604	0	604
8	Total 926000	27,864	-457	-19	27,388	3,614	31,002
	926010 Employee Benefits-Flex Credits						
9	Flex Credits Less Prices	-1,453	7 ¹		-1,446	325 b	-1,121
10	Group Medical Plan	8,511	-51 ¹		8,460	-29 b	8,431
11	Group Dental Plan	1,269	-7 ¹		1,262	-7 b	1,255
12	Group Vision Plan	200	-1 ¹		199	-1 b	198
13	Group Life Insurance Plan	1,244	-6 ¹		1,238	-252 b	986
14	Other/Administration	630	196 ¹		826	0	826
15	Subtotals: Non-Labor	10,401	138	0	10,539	36	10,575
16	Labor	283	-103 ¹		180	0	180
17	Total 926010	10,684	35	0	10,719	36	10,755
18	926020 Employee Benefits Transfer	-10,636	165		-10,471	72	-10,399
19	Grand Total Charged to O&M	27,912	-257	-19	27,636	3,722	31,358

¹ Updated estimates

² Deleted to limit issues

³ Normalized consulting costs for negotiations

Line 3: 119 Other postretirement benefits updated for 1,462 employees

-824 Executive life deleted to limit issues

Line 5: -34 HR Suite amortization update

602 Executive life deleted to limit issues

-27 401(k) administration deleted to limit issues

-177 HEI EICP, 401(k) administration, other non-recurring costs deleted to limit issues

Line 14: HR Suite update:

-55 Reduced software maintenance due to project delay

179 Increased consulting, training, additional software

72 Increased software on-cost

Line 16: HR Suite update

Col (e):

a Update to reflect actual 2007 expense

b Update per CA-IR-298

c Delete HR Suite amortization per CA-IR-295

Comparison to Projections: Retirement Plans -- Net Periodic Benefit Cost

Exhibit 1B

		2007 Actual (1)	2007 Projected from 2006 (2)
<u>Qualified Plans</u>			
(1)	HEI		
	HECO	\$ 17,710,729	\$ 17,802,000
INFORMATION ON OTHER COMPANIES DELETED			

Discount rate: 6.00%
Long term asset return rate: 8.5%
Salary scale: graded

New actuarial assumptions used for 2007
HEIRP: mortality, retirement rates and salary increase

JUNE 2007 UPDATE
DOCKET NO. 2006-0386
HECO T-12
EXHIBIT 2
PAGE 1 OF 2

Retiree Medical Plans: 2007 OPEB Postretirement Benefit Cost under SFAS 106 Exhibit 3C

	BU VEBA (1)	NBU VEBA (2)	401(h) (3)	Elec Disc (4)	Exec Life (5)	Total (6)
HECO	\$ 1,156,761	\$ 2,431,642	\$ 866,079	\$ 1,001,595	\$ 835,308	\$ 6,291,386
INFORMATION ON OTHER COMPANIES DELETED						

* Estimated.

Trend Rates:
Medical: 10.0 -> 5.0%
Dental: 5.0%
Vision: 4.0%
Discount Rate: 6.00%

Long term asset return rate:
BU VEBA, 401(h) Account: 8.50%
NBU VEBA: 4.75%
Elec Disc Trust: 5.25%

JUNE 2007 UPDATE

Ref: B. Tamashiro, HECO T-13, Miscellaneous Administrative and General Expenses, Depreciation Expense and Accumulated Depreciation and Miscellaneous Other Operating Revenues.

For HECO T-13, adjustments were made to: 1) increase the 2007 test year expense for Miscellaneous Administrative and General Expenses by approximately \$195,000; 2) decrease the 2007 test year amounts for depreciation expense by approximately \$973,000; 3) increase the 2007 test year amounts for accumulated depreciation by approximately \$3,652,000; and 4) decrease the 2007 test year revenues for Miscellaneous Other Operating Revenues by approximately \$71,000.

MISCELLANEOUS ADMINISTRATIVE AND GENERAL EXPENSES UPDATE

The adjustments for Miscellaneous Administrative and General Expenses are net of:

• Increase to regulatory commission expenses (NARUC 928)	\$ 37
• Increase in miscellaneous general expenses (NARUC 9302)	172
• Increase in rent expenses (NARUC 931)	24
• Decrease in maintenance of general plant (NARUC 932)	<u>(38)</u>
Total increase in Miscellaneous A&G Expenses	<u>\$ 195</u>

Page 5 (revised HECO-1301) of this update summarizes the adjustments by NARUC account and labor/nonlabor costs.

Account 928 – Regulatory Commission Expenses

The Company increased its test year 2007 estimate for account 928 – Regulatory Commission Expenses by \$37,000 due to an increase in Act 162 consulting costs for increased scope of services and the addition of Watson Wyatt consulting costs for the pension funding study that was filed in the instant proceeding on May 30, 2007, as ordered by the Commission in Decision and

Order No. 23223, dated January 26, 2007. Refer to page 6 for an updated regulatory commission expenses exhibit and Attachment 1 for the supporting Watson Wyatt engagement letter.

Account 9302 – Miscellaneous General Expenses

The Company increased its test year 2007 estimate for account 9302 – Miscellaneous General Expenses by approximately \$172,000 due to revisions to: 1) research and development expenses; 2) development and demonstration of new technology expenses; and 3) community services activities.

Research and Development

The Company increased its test year 2007 estimate for account 9302 – Miscellaneous General Expenses – Research and Development by \$53,000 to reflect the actual consultant's cost proposal to undertake the electric system analysis. Refer to page 8 for the revised research and development exhibit (revised HECO 1304, page 2) and Attachment 5-A of the Company's T-13 response to CA-IR-2 for the confidential copy of the consultant's cost proposal.

Development and Demonstration of New Technology

The Company increased its test year 2007 estimate for account 9302 – miscellaneous general expenses – development and demonstration of New Technology by approximately \$120,000 due to a change in scope of the Automated Meter Infrastructure ("AMI") pilot project and additional related research and development projects – AMI Faulted Circuit Indicator Evaluation and Critical Peak Pricing/Peak Time Rebates. Refer to part a of the Company's response to CA-IR-182 for detailed explanations supporting the increased estimated costs.

Community Service Activities

The Company decreased its test year 2007 estimate for account 9302 – Miscellaneous General Expenses – Community Service Activities by approximately \$1,000 due to the removal of the

Company's Special Projects Department. Refer to updated community services activities exhibit at page 9 (revised HECO-1304, page 3) and Attachment 1, page 1, column e, of the Company's T-13 response to CA-IR-1 for a detailed explanation of the decrease in costs.

Account 931 – Rent Expenses

The Company increased its test year 2007 estimate for account 931 – Rent Expense by approximately \$24,000 primarily due to planned relocations of Company personnel which will result in revisions to or assignments of existing lease agreements. Refer to the Company's response to CA-IR-299, and attachments thereto, for explanations of planned relocations, supporting leases and calculations, and revised rent exhibit.

Account 932 – Maintenance of General Plant

The Company decreased its test year 2007 estimate for account 932 – Maintenance of General Plant by approximately \$38,000 due to a change in the recordation of a section of the planned Ward parking structure rooftop maintenance work. This section of work will be recorded as a capital project rather than an O&M expense. Refer to page 10 for the updated maintenance of general plant exhibit (revised HECO-1306) and supporting explanations.

DEPRECIATION EXPENSE AND ACCUMULATED DEPRECIATION UPDATE

The Company decreased its test year 2007 estimate for depreciation expense by approximately \$973,000 and increased its test year 2007 estimate for accumulated depreciation by approximately \$3,652,000. The adjustment to the test year depreciation expense reflects the actual plant balance as of 12/31/06. The test year accumulated depreciation balance is higher than originally estimated primarily due to the 2006 recorded retirements being lower by approximately \$3,400,000. The adjustments also reflect updates to the historical 5-year averages for retirements, cost of removal, and salvage which are used as a basis for HECO's most current 2007 test year estimates for

retirements, cost of removal, and salvage. See pages 11-23 (revised HECO-1308, HECO-1309, HECO-1310, HECO-1311, HECO-WP-1301, HECO-WP-1302, HECO-WP-1303, HECO-WP-1304, and HECO-WP-1305) for supporting documentation.

MISCELLANEOUS OTHER OPERATING REVENUES UPDATE

The adjustments for Miscellaneous Other Operating Revenues are comprised of:

- Decrease in amortization of deferred gains (NARUC 414) \$ (7)
- Decrease in property licenses and leases (NARUC 454) (64)

Total decrease in Miscellaneous Other Operating Revenues \$ (71)

Account 414 – Amortization of Deferred Gains

The Company decreased its test year 2007 estimate for account 414 – Amortization of Deferred Gains by approximately \$7,000 due to the timing of the commencement of the amortization of deferred gains as a result of delays in the sale of the Aiea Park Place property. Refer to Note (3) of the revised miscellaneous other operating revenues exhibit (revised HECO-1312) at page 24 for more information.

Account 454 – Property Licenses and Leases

The Company decreased its test year 2007 estimate for account 454 – Property Licenses and Leases by approximately \$64,000 due to revised billings to HEI for the King Street building rental space beginning June 1, 2007. Refer to Note (4) of the revised miscellaneous other operating revenues exhibit at page 24 (revised HECO-1312) and supporting HEI rent calculation at Attachment 2, for more information. Also, refer to the Company's response to CA-IR-299 for additional information regarding the relocation of HEI personnel from the 4th floor of the King Street building.

Hawaiian Electric Company, Inc.
Miscellaneous Administrative and General Expenses - REVISED
Test Year 2007 (\$ in Thousands)

Line	Account	Notes	(A) 2007 Budget	(B) Budget Adj	(C) Norm	(D)=[A]+[B]+[C] 2007 Test Year Estimate	(E) JUNE 2007 UPDATE	(D)+[E] REVISED 2007 TY ESTIMATE
	928 Regulatory Commission Expense							
1	Non-Labor	(1)	198	(198)	283	283	37	320
2	Total 928		198	(198)	283	283	37	320
	9301 Institutional/Goodwill Advertising Expense							
3	Labor		11	-	-	11	-	11
4	Non-Labor		19	-	-	19	-	19
5	Total 9301		30	-	-	30	-	30
	9302 Miscellaneous General Expenses							
6	Labor	(2)	365	(5)	-	360	(1)	359
7	Non-Labor	(3)	3,042	(87)	-	2,955	173	3,128
8	Total 9302		3,407	(92)	-	3,315	172	3,487
	931 Rents Expense							
9	Non-Labor	(4)	3,019	(262)	-	2,757	24	2,781
10	Total 931		3,019	(262)	-	2,757	24	2,781
	932 Administrative and General Maintenance							
11	Labor	(5)	176	-	(20)	156	-	156
12	Non-Labor	(5)	1,458	(150)	(382)	948	(38)	908
13	Total 932		1,634	(150)	(382)	1,102	(38)	1,064
	Total Misc Administrative and General Expenses		8,288	(702)	(99)	7,487	195	7,682

Note: Numbers may not total exactly due to rounding.

Note (1): Budget adjustment to exclude amortization of 2005 regulatory commission expenses. Normalization adjustment for 2007 regulatory commission expenses amortized over 3 years. (See HECO-1303.)

Note (2): Budget adjustment to remove costs for Aloha United Way and Community Action Group amounting to \$5K. (See HECO-1304, page 3.)

Note (3): Budget adjustment to 1) remove portion of Edison Electric Institute dues attributed to government lobbying amounting to approximately \$87K (See HECO-1304, page 5).

Note (4): Budget adjustment to include additions for 1) Waterhouse building Suite 506 lease (\$53K), 2) ASB Tower 8th floor office lease (\$57K), 3) ASB Tower 8th Floor training room allocated cost (\$47K), and 4) South Street reclassification from NARUC 454 "Rent from Electric Property (\$57K), net of deductions for 1) entire ASB Tower 8th floor lease (-\$472K) and 2) misclassification of costs (-\$4K). (See HECO-1305).

Note (5): Budget adjustment due to change in project scope for covered parking level project. (See HECO-1306). Normalization adjustment for Ward Parking Facility Improvement Projects. (See HECO-1306.)

Source:
HECO-WP-101(B), pages 15-16 for Column A, lines 1-13.

JUNE 2007 UPDATE Source:
Pages 6, 7, and 10 for Column E, NARUC 928, 9302, and 932, respectively.
Attachment 11 of B. Tamashiro's response to CA-IR-299 for Column E, NARUC 931.

Hawaiian Electric Company, Inc.
Account 928 - Regulatory Commission Expenses - REVISED
Test Year 2007 Estimate (\$ in Thousands)

Amortization of 2005 TY regulatory commission expenses	\$	198
Estimated budget adjustment - Note (1)		(198)
Estimated 2007 TY Regulatory Commission Expenses:		
Legal fees	\$	540
Consultant - Regulatory Support		178
Consultant - Return on equity		64
Consultant - Act 162 - Note (3)		42
JUNE 2007 UPDATE - Additional Consultant Act 162 costs Note (4)		50
JUNE 2007 UPDATE - Consultant - Pension Note (5)		60
Printing services		10
Consultant - HEI impact (affidavit)		8
Supplies		6
Stenographer		1
Total 2007 rate case expenses	\$	959 [a]
Amortization period in years - Note (2)		3 [b]
Estimated amortization of 2007 regulatory commission expenses		320 [a]/[b]
Total 2007 Test Year Regulatory Commission Expenses - REVISED	\$	320

Note: Numbers may not total exactly due to rounding.

Note (1): The estimated budget adjustment represents the write-off of the remaining unamortized 2005 test year regulatory commission expenses based on Commission ruling in its Decision and Order No. 12679 (Docket No. 7064), of East Honolulu Community Services, Inc.'s request for a general rate case.

Note (2): The 2007 test year regulatory commission expenses will be amortized over a 3-year period based on the Company's anticipated timing of rate case filings between the current test year 2007 rate case filing compared to its next rate case filing for an anticipated 2010 test year.

Note (3): Act 162 consultant costs are estimated to be \$125,000 which will be shared by HECO, HELCO, and MECO evenly - \$125,000/3.

JUNE 2007 UPDATE:

Note (4): Refer to Attachment 2, page 6, and Attachment 2-B, both of B. Tamashiro's (T-13) response to CA-IR-2 for explanation of the additional costs in the 2007 test year and for support of those costs, respectively.

Note (5): Additional costs represents Watson Wyatt's pension study as ordered by the PUC in its D&O No. 23223 dated January 26, 2007 of Docket No. 05-0310 (AOCI Docket). As the pension study was a specific PUC requirement for HECO's 2007 test year rate case, the total cost of the study is included in HECO's cost of regulatory commission expenses. Refer to Attachment 1 for supporting engagement letter.

Hawaiian Electric Company, Inc.
Account 9302 - Miscellaneous General Expenses - REVISED
Test Year 2007 Estimate (\$ in Thousands)

	TY 2007	JUNE 2007 UPDATE	REVISED TY 2007
JUNE 2007 UPDATE - Research and Development - Note (1)	\$ 2,064	\$ 53	\$ 2,117
JUNE 2007 UPDATE - Develop and Demonstrate New Technology - Note (2)	527	120	647
JUNE 2007 UPDATE - Community Service Activities - Note (3)	280	(1)	279
Company Membership Dues	276	-	276
Ellipse Software Maintenance Fees	162	-	162
Other	6	-	6
Total 2007 Test Year Miscellaneous General Expenses - REVISED	\$ 3,315	\$ 172	\$ 3,487

Note: Numbers may not total exactly due to rounding.

JUNE 2007 UPDATE:

Note (1): Refer to page 8 at Note (3) for more information regarding the increase in costs.

Note (2): Refer to Attachment 4 of B. Tamashiro's response to CA-IR-182 for more information regarding the increase in costs.

Note (3): Refer to page 9 at Note (2) for more information regarding the decrease in costs.

Hawaiian Electric Company, Inc.
Research and Development (R&D) Expenses - REVISED
Test Year 2007 (\$ in Thousands)

Total 2007 Test Year R&D Expenses:

EPRI Dues - HECO's Portion	\$	1,608
JUNE 2007 UPDATE - Other Long-Term R&D Strategies - Note (3)		509
Total 2007 Test Year R&D Expenses - REVISED	\$	<u>2,117</u>

EPRI Dues - HECO's Portion:

Total 2007 EPRI Dues	Note (1)	\$	2,085
HECO's Portion	Note (2)		<u>77.094%</u>
Total Estimated EPRI Dues - HECO's Portion		\$	<u>1,608</u>

Note: Numbers may not total exactly due to rounding.

Note (1): Amount represents the annual EPRI membership dues per the 5-year EPRI Membership Agreement between HECO and EPRI.

Note (2): HECO's portion of the total EPRI dues is based on the below allocation:

HECO TY 1995 Docket No. 7766, D&O No. 14412	1,698	77.094%
HELCO TY 2000 Docket No. 99-0207, D&O No. 18365	270	12.254%
MECO TY 1999 Docket No. 97-0346, Amended D&O No. 16922	<u>235</u>	<u>10.655%</u>
Total	<u>2,203</u>	

JUNE 2007 UPDATE:

Note (3): The Company's Other Long-Term R&D Strategies has been revised (increased by \$53,000) to take into consideration the actual proposed vendor cost of the Electrical System Analysis study. Refer to Attachment 5-A of B. Tamashiro's response to CA-IR-2 for copy of the vendor's proposal.

Hawaiian Electric Company, Inc.
Community Service Activities - REVISED
Test Year 2007 Estimate (\$ in Thousands)

Total Community Service Activities - Note (2)	\$	284
Aloha United Way & Community Action Group - Note (1)		<u>5</u>
Total 2007 Test Year Community Service Activities - REVISED	\$	<u>279</u>

Note: Numbers may not total exactly due to rounding.

Note (1): Costs of activities related to the Aloha United Way and Community Action Group activities are excluded as a simplification adjustment due to the Commission's disallowance of these costs in the Company's test year 1990 and 1992 rate cases (Dockets 6531 and 6998, respectively).

JUNE 2007 UPDATE:

Note (2): Total Community Service Activities was decreased by approximately \$1,000 due to the removal of the Special Projects Department due to the retirement of its Vice President. Refer to Attachment 1, page 1, column e, of B. Tamashiro's (T-13) response to CA-IR-1 for a detailed explanation of the decrease in costs.

Hawaiian Electric Company, Inc.
Account 932 - Maintenance of General Plant - REVISED
Test Year 2007 Estimate (\$ in Thousands)

Annual Recurring Maintenance:
Buildings and Grounds Maintenance
Office Equipment Maintenance

\$ 566
154

Ward Parking Facility Improvement Projects (Non-recurring):

Roof Level Improvements	\$ 520	
Covered Level Improvements	255	
Stairwell Improvements	102	
Ramp Wall Repairs	37	
Total Ward Improvement Projects	914	
Less: Revised scope for Covered Level	(150)	
JUNE 2007 UPDATE - Less: capital work Note (2)	(75)	
Total Ward Improvement Projects for Test Year	\$ 689	[a]

Normalization period in years - Note (1) 2 [b]

Total Normalized Ward Improvement Projects 344 [a]/[b]

Total 2007 Test Year Maintenance of General Plant - REVISED \$ 1,064

Note: Numbers may not total exactly due to rounding.

Note (1): The normalization period applied to the Ward Parking Facility Improvement projects is primarily based on a more reasonable level of non-recurring projects estimated to occur in the next several years.

JUNE 2007 UPDATE

Note (2): The replacement of the lighting fixtures of the roof level improvement project will be capitalized in a separate project. Refer to Note (2) of Attachment 14 of B. Tamashiro's response to CA-IR-2 for cost support.

Hawaiian Electric Company, Inc.
Depreciation and Amortization Expense - REVISED
For Years 2002 - 2007 (\$ in Thousands)

Line		Recorded 2002	Recorded 2003	Recorded 2004	Recorded 2005	(A) Recorded 2006	(B) REVISED Test Year Estimate 2007
1	Depreciation Accrual	72,262	75,603	78,314	79,826	84,358	88,785
2	Less: Depreciation on vehicles	(1,219)	(1,320)	(1,473)	(1,774)	(1,812)	(1,790)
3	Amortization of CIAC	(6,974)	(6,924)	(7,287)	(7,484)	(8,056)	(8,489)
4	Amortization of Federal ITC - Note (1)	(1,061)	(1,020)	(976)	(905)	(847)	(764)
5	Amortization of SFAS 109 reg asset- Note (1)	514	604	697	814	945	1,021
6	Depreciation Expense	63,522	66,943	69,275	70,477	74,588	78,763

Note (1): Amortization of Federal ITC is included in depreciation expense in accordance with the SFAS 109 method of accounting for income taxes as described in Mr. Lon Okada's testimony in HECO T-15.

Source:

See page 13 (REVISED HECO-1310) for Columns A & B, lines 1 and 2.
See page 18 (REVISED HECO-WP-1302) for Columns A & B, line 3.

Hawaiian Electric Company, Inc.
Accumulated Depreciation - REVISED
For Years 2002 - 2007 (\$ in Thousands)

Line		Recorded 2002	Recorded 2003	Recorded 2004	Recorded 2005	(A) Recorded 2006	(B) REVISED Test Year Estimate 2007
1	Acc Dep Beg Bal at January 1	815,194	877,401	939,595	988,061	1,050,526	1,122,193
2	Plus:						
3	Depreciation Accrual	72,262	75,603	78,314	79,769	84,358	88,785
3	Salvage	159	297	279	170	221	236
4	Less:						
4	Retirements - Note (2)	(6,697)	(9,665)	(25,354)	(10,273)	(7,217)	(13,005)
5	Cost of Removal	(3,517)	(4,041)	(4,773)	(7,138)	(5,909)	(5,764)
6	Adjustments - Note (1)				(63)	214	
7	Acc Dep End Bal at December 31	877,401	939,595	988,061	1,050,526	1,122,193	1,182,445

2007 UPDATE:

Note (1): Reclassification of accumulated depreciation for E-business from utility to non-utility (approximately \$74K, net) offset by entry to establish ARO accumulated depreciation (approximately \$11K) in 2005. Reclassification of accumulated depreciation for the Interisland Communication System from non-utility to utility (approximately \$214K) in 2006.

Note (2): Effective in 2004, retirements include retirement of assets subject to vintage amortization accounting.

Source:

See page 15 (REVISED HECO-WP-1301) for Columns A & B, lines 2 and 4.

See pages 19-20 (REVISED HECO-WP-1303) for Columns A & B, lines 3 and 5.

Hawaiian Electric Company, Inc.
Depreciation and Amortization Accrual - REVISED
2006-2007 (\$ in Thousands)

Line	Plant Group	(A) Depreciable Plant at 1/1/06	(B) Composite Rate	(C) 2006 Dep Accr	(D) REVISED Depreciable Plant at 1/1/07	(E) REVISED Composite Rate	(F) REVISED 2007 Dep Accr
1	Production	529,205	1.7056%	9,026	552,031	1.6970%	9,368
2	Transmission	550,826	2.9704%	16,362	576,639	2.9478%	16,998
3	Distribution - Note (2)	1,052,118	4.3036%	45,279	1,097,302	4.2969%	47,150
4	General - Note (1)	139,610	8.5087%	11,879	169,797	7.9383%	13,479
5	Vehicles	24,924	7.2701%	1,812	24,622	7.2699%	1,790
6	TOTAL	2,296,683	3.6730%	84,358	2,420,391	3.6682%	88,785

Note (1): General 2006 and 2007 Dep Accr includes depreciation of leasehold improvements of \$37,000 and \$19,000, respectively. Also, the depreciation accrual includes net unrecovered amortization of \$3,298,000.

Note (2): Distribution depreciable plant includes ARO asset amounting to \$20,000 and \$18,000 at 1/1/06 and 1/1/07, respectively.

Note (3): Note that the depreciable plant balances above exclude land.

Source:

See Page 15 (REVISED HECO-WP-1301) for Columns A, C, D and F.

Hawaiian Electric Company, Inc.
Summary of Plant Balances, Accumulated Depreciation
and Annual Dep and Amortization Accruals - REVISED
For Years 2002 - 2007 (\$ in Thousands)

Line	Year	[A] Dep Plant at Beg of Yr	[B] Depr Accrual Note (1)	[C]=[B]/[A] As % of Plant	[D] Acc Depr at Beg of Yr	[E]=[D]/[A] As % of Plant
1	2002	1,945,296	72,262	3.71%	815,194	41.91%
2	2003	2,024,963	75,603	3.73%	877,401	43.33%
3	2004	2,085,866	78,314	3.75%	939,595	45.05%
4	2005	2,204,392	79,769	3.62%	988,061	44.82%
5	2006	2,296,683	84,358	3.67%	1,050,526	45.74%
6	2007 REVISED	2,420,391	88,785	3.67%	1,122,193	46.36%

Note (1): Includes amortization and depreciation on leasehold improvements and vehicles

Source:

See page 15 (REVISED HECO -WP-1301) for Columns A, B and D, lines 5 and 6.

Hawaiian Electric Company, Inc.
Plant Roll-Forward and Book Depreciation & Amortization - REVISED
Test Year 2007 (\$ in Thousands)

	Recorded Plant a/o 12/31/2006	Recorded 2006 Depr & Amort	REVISED Estimated Plant a/o 12/31/2007	REVISED TY 2007 Depr & Amort
Production				
Beginning Balance	\$ 529,205		\$ 552,032	
Add: Additions	23,253		34,432	
Less: Retirements	426		628	
Ending Balance	552,032	\$ 9,025	585,835	\$ 9,368
Transmission				
Beginning Balance	550,827		576,640	
Add: Additions	26,428		10,519	
Less: Retirements	815		1,081	
Ending Balance	576,440	18,362	586,078	18,998
Distribution				
Beginning Balance	1,052,098		1,087,284	
Add: Additions	49,138		56,824	
Less: Retirements	3,952		4,390	
Ending Balance	1,097,284	45,278	1,149,518	47,149
General (Excl LH Improvements)				
Beginning Balance	139,810		169,798	
Add: Additions	31,818		15,254	
Less: Retirements	1,430		5,478	
Ending Balance	169,798	8,545	179,574	10,163
Vehicles				
Beginning Balance	24,924		24,822	
Add: Additions	491		3,920	
Less: Retirements	793		1,447	
Ending Balance	24,622	1,812	27,095	1,790
ARO Assets (Distribution)				
Beginning Balance	20		18	
Add: Additions	2		1	
Less: Retirements	18	1	17	
Total - Excl. Land				
Beginning Balance	2,296,683		2,420,390	
Add: Additions	130,928		120,749	
Less: Retirements	7,218		13,003	
Ending Balance	2,420,393	81,022	2,528,136	85,468
Land (Incl LH Improvements)				
Beginning Balance	32,580		33,165	
Add: Additions	628		823	
Less: Retirements	23		-	
Ending Balance	33,185	37	33,988	19
Total - Incl Land				
Beginning Balance	2,329,243		2,453,555	
Add: Additions	131,554		121,572	
Less: Retirements	7,241		13,003	
Ending Balance	\$ 2,453,555		\$ 2,562,124	
Additional Depreciation & Amortization - Net Unrecovered Amortization - Note (2)		3,298		3,298
Total Depreciation & Amortization		\$ 84,357		\$ 88,785
Accumulated Depreciation Summary				
Beginning Balance	\$ 1,050,528		\$ 1,122,192	
Add: Depreciation	84,357		88,785	
Add: Estimated Salvage per HECO-WP-1303	221		236	
Add: ICS Accum Depr Transferred to Utility	214			
Less: Retirements per HECO-WP-1303	7,217		13,005	
Less: Removal Costs per HECO-WP-1303	5,909		5,784	
Ending Balance	\$ 1,122,192		\$ 1,192,444	

Note: Numbers may not total exactly due to rounding.

Note (1): Details provided on pages 2 and 3

Note (2): Amount represents the annual amount for a five-year recovery of net unrecovered amortization as approved by the Commission in Decision and Order No. 21331, Docket No. 02-0391, dated September 3, 2004

Hawaiian Electric Company, Inc.
Plant Roll-Forward and Book Depreciation - REVISED
Test Year 2007 (\$ In Thousands)

	(A)			(B)	[A] x Beg Bal (B)
	Note (1) 2000 Depr Study Rates	Recorded Depreciable Plant a/o 12/31/2006	Recorded 2006 Depr	REVISED Estimated Depreciable Plant a/o 12/31/2007	REVISED TY 2007 Depr
Production					
Beginning Balance		\$ 524,617		\$ 547,390	
Add: Additions		22,923		34,432	
Less: Retirements		150		499	
Ending Balance	0.016689	547,390	\$ 8,796	581,323	\$ 9,136
Transmission					
Beginning Balance		550,827		576,640	
Add: Additions		26,428		10,519	
Less: Retirements		615		1,081	
Ending Balance	0.029478	576,640	16,362	586,098	16,996
Distribution					
Beginning Balance		1,052,086		1,097,284	
Add: Additions		49,138		56,624	
Less: Retirements		3,852		4,390	
Ending Balance	0.042989	1,097,284	45,278	1,149,518	47,149
General (Excl LH Improvements)					
Beginning Balance		107,993		136,203	
Add: Additions		26,210		8,949	
Less: Retirements		-		1,261	
Ending Balance	0.052613	136,203	5,799	143,891	7,166
Vehicles					
Beginning Balance		24,624		24,622	
Add: Additions		491		3,920	
Less: Retirements		793		1,447	
Ending Balance	0.072700	24,622	1,812	27,085	1,790
Total - Excl. Land					
Beginning Balance		2,260,458		2,382,138	
Add: Additions		127,190		114,444	
Less: Retirements		5,510		8,658	
Ending Balance		2,382,138	78,047	2,487,924	62,240
Land (Incl. LH Improvements)					
Beginning Balance		32,560		33,185	
Add: Additions		628		623	
Less: Retirements		23		-	
Ending Balance		33,165	37	33,988	19
Total - Incl Land					
Beginning Balance		2,293,018		2,415,303	
Add: Additions		127,818		115,267	
Less: Retirements		5,533		8,658	
Ending Balance		\$ 2,415,303		\$ 2,521,912	
Total Depreciation			\$ 78,084		\$ 82,259

Note: Numbers may not total exactly due to rounding.

Note (1): See page 22 (REVISED HECO-WP-1305) for derivation of the composite rates.

Hawaiian Electric Company, Inc.
Plant Roll-Forward and Book Amortization - REVISED
Test Year 2007 (\$ in Thousands)

	[A]		[B]	[A] x Beg Bal [B]
	Note (1) 2000 Depr Study Rates	Recorded Amortizable Plant a/o 12/31/2006	Recorded 2006 Amort	REVISED Estimated Amortizable Plant a/o 12/31/2007 REVISED TY 2007 Amort
Production				
Beginning Balance		\$ 4,588		\$ 4,842
Add: Additions		330		-
Less: Retirements		278		129
Ending Balance	0.050000	4,642	\$ 229	4,512 \$ 232
General				
Beginning Balance		31,817		33,593
Add: Additions		3,406		6,305
Less: Retirements		1,430		4,215
Ending Balance	0.089201	33,593	2,746	35,683 2,997
Total				
Beginning Balance		38,205		38,235
Add: Additions		3,736		6,305
Less: Retirements		1,706		4,344
Ending Balance		\$ 38,235	2,975	\$ 40,195 3,229
Additional Amortization - Net Unrecovered Amortization			3,298	3,298
Total Amortization			\$ 6,273	\$ 6,526

Note: Numbers may not total exactly due to rounding.

Note (1): See page 23 (REVISED HECO-WP-1305) for derivation of the composite rates.

Hawaiian Electric Company, Inc.
Projected Retirements, Cost of Removal and Gross Salvage for Depreciable Plant - REVISED
Recorded 2002 to 2006 (\$ in Thousands)

	Recorded 2002	Recorded 2003	Recorded 2004	Recorded 2005	Recorded 2006	Total Recorded
Depr. Plant Balances - Beginning of the Year [a]						
Production	\$ 427,508	\$ 443,528	\$ 457,074	\$ 516,558	\$ 529,205	\$ 2,373,872
Transmission	497,639	522,153	526,540	539,592	550,826	2,636,750
Distribution	881,189	913,623	947,610	998,044	1,052,098	4,792,564
General	114,917	121,084	130,099	125,796	146,552	638,448
Vehicles	24,044	24,575	24,542	24,402	24,924	122,487
Total	\$ 1,945,296	\$ 2,024,963	\$ 2,085,865	\$ 2,204,392	\$ 2,303,605	\$ 10,564,122
Retirements [b]						
Production	\$ 253	\$ 292	\$ 437	\$ 1,033	\$ 149	\$ 2,165
Transmission	361	2,213	859	805	615	4,853
Distribution	3,290	3,209	4,580	4,166	3,952	19,177
General	1,472	1,864	1,783	793	-	5,911
Vehicles	1,315	2,087	2,009	994	793	7,198
Total	\$ 6,691	\$ 9,665	\$ 9,647	\$ 7,792	\$ 5,509	\$ 39,303
Percentages of Book Retirements to Beginning Plant Balances [b] / [a]						
Production	0.000592	0.000659	0.000956	0.002001	0.000282	0.000912
Transmission	0.000726	0.004238	0.001631	0.001493	0.001117	0.001840
Distribution	0.003734	0.003512	0.004812	0.004174	0.003756	0.004001
General	0.012806	0.015397	0.013702	0.006301	0.000000	0.009259
Vehicles	0.054683	0.084910	0.081864	0.040752	0.031817	0.058765
Cost of Removal [c]						
Production	\$ 78	\$ 614	\$ 342	\$ 640	\$ 248	\$ 1,923
Transmission	977	694	896	953	1,031	4,550
Distribution	2,457	2,787	3,406	5,539	4,567	18,756
General	5	(56)	128	7	63	146
Vehicles	-	2	-	-	-	2
Total	\$ 3,517	\$ 4,041	\$ 4,772	\$ 7,138	\$ 5,909	\$ 25,378
Percentages of Removal Cost to Retirements [c] / [b]						
Production	0.309804	2.101125	0.782806	0.619564	1.664430	0.888331
Transmission	2.704210	0.313670	1.043709	1.182786	1.676423	0.937701
Distribution	0.746926	0.868474	0.746919	1.329621	1.155617	0.978067
General	0.003185	(0.030194)	0.071772	0.008406	#DIV/0!	0.024699
Vehicles	0.000000	0.001024	0.000000	0.000000	0.000000	0.000297
Gross Salvage [d]						
Production	\$ -	\$ 6	\$ -	\$ -	\$ -	\$ 6
Transmission	-	-	-	-	-	-
Distribution	7	12	69	85	135	309
General	24	8	-	-	1	33
Vehicles	127	270	209	85	85	777
Total	\$ 158	\$ 297	\$ 279	\$ 170	\$ 221	\$ 1,125
Percentages of Gross Salvage to Retirements [d] / [b]						
Production	0.000000	0.020752	0.000000	0.000000	0.000000	0.002803
Transmission	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Distribution	0.002202	0.003808	0.015239	0.020398	0.034160	0.016109
General	0.016473	0.004364	0.000000	0.000000	#DIV/0!	0.005647
Vehicles	0.096561	0.129487	0.104185	0.085772	0.107188	0.107914

Hawaiian Electric Company, Inc.
Amortization of CIAC - REVISED
Test Year 2007 (\$ in Thousands)

	Recorded 2005	Recorded 2006	REVISED Test Year Estimate 2007
Amortization through 2004	\$ 7,484	\$ 7,408	\$ 7,312
<u>Amortization of 2005 Vintage</u>			
Receipts	\$ 19,339		
Plus: Transfers from Cust Adv	110		
Base for Amortization	\$ 19,449		
Divided by 30	30		
Subtotal	\$ 648	648	648
<u>Amortization of 2006 Vintage</u>			
Receipts	\$ 15,836		
Plus: Transfers from Cust Adv	24		
Base for Amortization	\$ 15,860		
Divided by 30	30		
Subtotal	\$ 529		529
Annual Amortization of CIAC		\$ 8,056	\$ 8,489

Hawaiian Electric Company, Inc.
Projected Retirements, Cost of Removal and Gross Salvage for Depreciable Plant - REVISED
Estimated 2007 (\$ in Thousands)

	REVISED Test Year Estimate 2007
Depr Plant Balance- Beginning of the Year	
Production	\$ 547,390
Transmission	576,639
Distribution	1,097,284
General	136,203
Vehicles	24,622
Total	\$ 2,382,138
Retirements	
Production	\$ 499
Transmission	1,061
Distribution	4,390
General	1,261
Vehicles	1,447
Total	\$ 8,658
Cost of Removal	
Production	\$ 443
Transmission	995
Distribution	4,294
General	31
Vehicles	0
Total	\$ 5,764
Gross Salvage	
Production	\$ 1
Transmission	0
Distribution	71
General	7
Vehicles	156
Total	\$ 235

Hawaiian Electric Company, Inc.
Estimated Accrual for Regulatory Liability to Recover Future Net Salvage - REVISED
2006 and Test Year 2007 (\$ in Thousands)

Account Number	(A) 12/31/05 Recorded Plant Balances	(B) Net Salvage Rate per D&O No. 21331	(C)=(A)x(B) 2006 Recorded COR Accrual	(D)= Subtotal(C)/ Subtotal(A) Weighted Avg COR Accrual Rate	(E) 12/31/06 Recorded Plant Balances WP-1301 pg.2	(F)=(D)/(E) REVISED TY 2007 Estimated COR Accrual
311.00	\$ 87,812	0.00200	\$ 175			
312.00	250,322	0.00206	516			
314.00	118,508	0.00194	230			
315.00	27,706	0.00195	54			
316.00	22,163	0.00209	46			
341.00	1,139	0.00085	1			
342.00	1,427	0.00096	1			
343.00	7,371	0.00085	6			
344.00	5,379	0.00091	5			
345.00	2,701	0.00100	3			
346.00	290	0.00067	0			
Production	524,617		1,038	0.00198	\$ 547,390	\$ 1,083
350.10	9,585	0.00000	-			
352.00	40,240	0.00385	155			
353.00	198,419	0.00480	972			
354.00	17,404	0.00600	104			
355.00	141,968	0.01042	1,479			
356.00	77,425	0.02286	1,770			
357.00	26,435	0.00167	44			
358.00	36,947	0.00400	148			
359.00	2,404	0.00000	-			
Transmission	550,826		4,673	0.00848	576,639	4,892
360.10	289	0.00000	-			
361.00	21,680	0.00500	108			
362.00	114,935	0.00851	978			
364.00	95,065	0.01250	1,188			
365.00	86,314	0.03125	2,697			
366.00	196,384	0.00500	982			
367.00	220,261	0.02250	4,956			
368.00	119,268	0.01111	1,325			
369.10	36,339	0.03750	1,363			
369.20	136,703	0.02100	2,871			
370.00	24,861	0.00000	-			
Distribution	1,052,098		16,468	0.01565	1,097,284	17,176
390.00	30,453	0.01111	338			
394.00	1,507	(0.00067)	(1)			
395.00	153	0.00000	-			
397.00	73,950	0.00417	308			
398.00	1,930	0.00227	4			
General	107,993		650	0.00602	136,203	820
392.00	24,924	(0.00357)	(89)			
Vehicles	24,924		(89)	(0.00357)	24,622	(88)
Grand Total	\$ 2,260,458		\$ 22,740		\$ 2,382,138	\$ 23,882

Hawaiian Electric Company, Inc.
Calculation of 2000 Depreciation Study Rates Weighted for Depreciable Asset Balance
(\$ in Thousands)

Account	Depreciable Assets a/o 1/1/07	Straight-Line Remaining-Life Rates	REVISED Depreciation Accrual Year 2007
311	\$ 97,427	0.019270 *	\$ 1,877
312	252,292	0.017140 *	4,324
314	119,404	0.013620 *	1,626
315	28,257	0.017370 *	491
316	21,788	0.023370 *	509
Tot - Steam	519,168	0.017004	8,828
341	1,139	0.008900 *	10
342	1,427	0.015690 *	22
343	10,856	0.008760 *	95
344	11,774	0.011310 *	133
345	2,737	0.017760 *	49
346	289	-0.006400 *	(2)
Tot - Gas Turbine	28,222	0.010898	308
Tot - Production	547,390	0.016889	9,136
3501	9,584	0.009000 *	86
352	32,670	0.024000 *	784
353	208,602	0.025600 *	5,340
354	17,404	0.025700 *	447
355	144,789	0.030900 *	4,474
356	79,988	0.051900 *	4,150
357	39,353	0.017000 *	669
358	41,866	0.024100 *	1,009
359	2,404	0.015800 *	38
Tot - Transmission	576,639	0.029478	16,988
3601	332	0.020500 *	7
361	23,929	0.033500 *	802
362	126,028	0.029900 *	3,768
364	99,508	0.032900 *	3,274
365	87,701	0.065400 *	5,736
366	200,556	0.022000 *	4,412
367	227,387	0.054500 *	12,393
368	126,885	0.060500 *	7,677
369.1	37,012	0.072800 *	2,687
369.2	141,399	0.039500 *	5,585
370	28,547	0.030500 *	810
Tot - Distribution	1,097,284	0.042969	47,150
Tot - T & D	1,673,923		64,148
390	46,828	0.040900 *	1,915
394	1,732	0.036700 *	64
395	153	0.034500 *	5
397	85,528	0.059400 *	5,080
398	1,984	0.051800 *	102
Tot - General	136,203	0.052813	7,166
Sub-Total	2,357,516		80,449
3902 (King)	6,542	0.002870	19
3902 (CPP)	762	0.000850	1
3902 (Hon Cl)	7	0.000000	-
Tot- LH Improvements	7,311		19
392	24,822	0.072700 *	1,790
Utility Total	\$ 2,389,449	0.034426	\$ 82,259

Note: Numbers may not total exactly due to rounding.

* Agreed to D&O No. 21331, dated September 3, 2004 Docket No. 02-0391 Attachment C.

Hawaiian Electric Company, Inc.
Calculation of 2000 Amortizable Rates Weighted for Amortizable Plant Balance
(\$ in Thousands)

Account	[A] Amortizable Assets a/o 1/1/07	[B] Amortization Rates (%) Note (1)	[A]x[B] Amortization Accrual Year 2007
316 - Steam	\$ 4,642	0.050000 *	\$ 232
346 - Other Production	-	0.050000 *	-
Tot - Production	<u>4,642</u>	0.050000	<u>232</u>
3911	10,147	0.142860 *	1,450
3912	2,096	0.083340 *	175
3913	7,398	0.066670 *	493
393	797	0.040000 *	32
394	9,887	0.066700 *	659
395	1,348	0.066700 *	90
396	313	0.055560 *	17
398	1,608	0.050000 *	80
Tot - General	<u>33,594</u>	0.089199	<u>2,997</u>
Utility Total	<u>\$ 38,236</u>	0.084440	<u>\$ 3,229</u>

Note: Numbers may not total exactly due to rounding.

* Agreed to D&O No. 21331, dated September 3, 2004 Docket No. 02-0391 Attachment D.

Hawaiian Electric Company, Inc.
Miscellaneous Other Operating Revenues - REVISED
Test Year 2007 (\$ in Thousands)

			<u>Test Year 2007</u>
<u>Property Sold:</u>			
Queen Emma	Dkt 02-0098, D&O 19839	\$ 280	
Iolani Court Plaza	Dkt 98-0170, D&O 16833	138	
Kuliouou	Dkt 98-0314, D&O 16935	40	
Waianae	Dkt 98-0314, D&O 16935	22	
JUNE 2007 UPDATE Aiea Park Place - Note (1)&(3)	Dkt 2006-0323, D&O pending	11	
Palolo	Dkt 05-0280, D&O 22664	<u>9</u>	
Total Amortization of Deferred Gains - REVISED		\$	500
 <u>Property Licenses and Leases:</u>			
JUNE 2007 UPDATE King Street building - HEI Note (4)		\$ 216	
Company-owned land - Various		196	
Ward Avenue warehouse - Hawaii Fuel Cell		<u>32</u>	
Total Property Licenses and Leases - REVISED			444
Parking Revenue			261
Telecom Rent			214
Payment Protection Insurance			128
Other - Note (2)			<u>77</u>
Total Miscellaneous Other Operating Revenues		\$	<u>1,624</u>

Note: Totals may not add due to rounding.

Note (1): Sale is currently pending approval by the Commission in Docket No. 2006-0323. Assumes Commission approval is obtained and amortization commencing in May 2007.

Note (2): Includes amortization of Iolani Court lease premiums of approximately \$4,000. Refer to Ms. Patsy Nanbu's testimony at HECO T-10 for discussion on the amortization of Iolani Court lease premiums.

JUNE 2007 UPDATE:

Note (3): The amount was slightly decreased by approximately \$7,000 due to the change in amortization commencement due to a 3 month delay in closing of the sale for this property.

Note (4): As discussed in B. Tamashiro's response to CA-IR-299, HEI personnel will relocate from the 4th floor King Street building to another location. As such, the monthly rental revenues have decreased accordingly, by approximately \$64,000. See Attachment 2, page 2 for revised calculation.



Tayne S. Y. Sekimura
Financial Vice President

February 19, 2007

Mr. Douglas Lum
Consultant
Watson Wyatt Worldwide
737 Bishop Street, Suite 2340
Honolulu, HI 96813-3214

Dear Mr. Lum:

Subject: Engagement Letter – Pension Funding Policy

Thank you for your response to our Request for Proposal. The Engagement Letter dated February 12, 2007, which is enclosed, is accepted and agreed except for the following changes:

- The deadline for the "Preliminary Study Results" shall be April 18, 2007.
- The deadline to "Submit Draft Report to Companies" shall remain at April 30, 2007.
- In May 2007, subsequent to submitting the draft report but before the final report Watson Wyatt will provide an oral presentation and discussion of the report.

If you have any questions, please contact Julie Price at 543-4670 or Gayle Ohashi at 543-7740. We look forward to your report.

Sincerely,

Tayne Sekimura

Enclosure



February 12, 2007

Ms. Tayne Sekimura
Financial Vice President
Hawaiian Electric Company, Inc.
P.O. Box 2750
Honolulu, Hawaii 96840-0001

Subject: Engagement Letter – Pension Funding Policy

Dear Tayne:

This letter has been prepared in response to your Request for Proposal – Pension Funding Policy. This letter agreement will confirm the scope and terms of Watson Wyatt's engagement by Hawaiian Electric to assist in preparing a formal funding policy for Hawaiian Electric Company, Inc. (HECO), Hawaii Electric Light Company, Inc. (HELCO) and Maui Electric Company, Limited (MECO). We have met with Gayle Ohashi and others to discuss the parameters of the project.

Scope of Services

Watson Wyatt will provide the consulting services described in Attachment 1 to this letter. Leonard Smothermon will serve as the leader of this project and will have responsibility for its overall success. Doug Lum will serve as the project manager and the day-to-day contact for all aspects of the project. Gene Wickes will provide high level support as the senior peer reviewer. Other Watson Wyatt personnel may assist with the project as needed.

Per discussions with Gayle Ohashi, et al., we will work with Hawaiian Electric to use January 1, 2007 valuation data for this study. The data has not been received but we expect it to arrive by the end of next week, February 23. To facilitate processing time we request the milestones of March 31, 2007 and April 30, 2007 be shifted to April 30, 2007 and May 15, 2007, maintaining the "Companies File Report with Commission" deadline at May 31, 2007. If the data is received sooner we could accelerate the "Preliminary Study Results" and/or the "Submit Draft Report to Companies" milestones. We will work closely with you on scheduling and use reasonable efforts to adhere to this schedule but we cannot guarantee that this schedule will be met.

Terms and Conditions of Engagement

The services described in Attachment 1 and any other services that Watson Wyatt provides will be provided subject to the Terms and Conditions of Engagement signed on December 23, 2002 by Peter Lewis.

Watson Wyatt & Company

Suite 2240 \ 777 Bishop Street \ Honolulu, HI 96813-7214 \ 808 535 0300 Telephone \ 808 531 1853 Fax

W

Biographies of Watson Wyatt staff involved in the project are attached.

- Doug Lutz will be the project manager and day-to-day contact for all aspects of the project.
- Leonard Smothermon will be the project lead with overall responsibility for the project's success.
- Gene Wickes will be the senior peer reviewer and resource expert for the project.
- Ray Tamura, Kristen Tanaka and Sandra Okamura will be the consultants tasked with the analytical functions (data preparation, projection modeling, etc.)

We intend to use the January 1, 2007 valuation participant data and trust information to perform this analysis. No other data is required from the companies.

Project Fee

Fees for the services outlined above are \$60,000 on a fixed fee basis. Any out of scope request subsequent to the onset of the project will be identified and communicated to you prior to performing said out of scope services subject to additional fees. The fixed fee quote includes our 7% technical charge.

Per discussion with Gayle Ohashi, et al., the scope of services related to support in regulatory proceedings is yet to be defined in a manner to facilitate a fee quote. Hourly rates for such services are in the range of \$580 - \$642 per hour. However the hours required will differ if live testimony is needed or if written testimony may be provided. If live testimony is required, there may also be expenses related to travel cost of the appropriate expert witness. Once the desired scope and support are defined, we can provide a more comprehensive fee estimate.


Ms. Tayne Sekimura
February 12, 2007
Page 2

W

If this letter and the Attachment accurately describe the terms of our engagement, please have an authorized representative of Hawaiian Electric sign and return the enclosed copy to us.

Watson Wyatt & Company appreciates the opportunity to be of service to Hawaiian Electric. If you have any questions now or during the course of our engagement, please contact us.

Very truly yours,



Douglas Lum
Consultant



Leonard Smotherman, A.S.A.
Consulting Actuary

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Enclosure: Attachment 1 - Scope of Services

ACCEPTED AND AGREED:

Hawaiian Electric Company, Inc.

By: _____

Title: _____

Date: _____

W

Attachment 1

Scope of Services

Provide overview of legal and tax requirements to consider in developing a pension funding policy overview including a discussion of the Pension Protection Act (PPA), reporting under Financial Accounting Standards 158 (FAS 158) and practices adopted by other utilities subject to rate commissions.

Prepare four 10-year projections reflecting different pension funding policies based on three economic scenarios. Results to be presented in tabular format by company (HECO, HELCO, MECO) and in total.

Pension Funding Policies

- Minimum ERISA funding
- Maximum tax deductible – only if it is a viable alternative given the increase in maximum deductibility provided under PPA
- Net Periodic Pension Cost
- 100% Projected Benefit Obligation (PBO) funding

Economic Scenarios – Parameters to be agreed upon prior to March 1, 2007 representing:

- Weaker market
- Stable market (baseline)
- Stronger market

Results to include the following information:

- Annual cash contributions
- Annual net periodic cost
- Balance sheet presentation
 - PBO
 - Market value assets
 - Funded status
 - Accumulated other comprehensive income
 - Unrecognized gain/loss
 - Unrecognized prior service cost
 - Unrecognized transition obligation
- Annual ratepayer impact

Provide an analysis and discussion of the impact of funding scenarios on various stakeholders including ratepayers, shareholders and plan beneficiaries similar to the sample information provided to us by Hawaiian Electric at our February 8, 2007 meeting.

INTEROFFICE CORRESPONDENCE



Hawaiian Electric Co., Inc.

May 3, 2007

To: Pat Wong
From: Cheryl Fujiwara *CK*
Subject: King Street Building - Amended Square Footage and Rent

As a result of the upcoming HEI moves off of the 4th floor, HEI's floor area has been reduced. Thus, effective from June 1, 2007, the floor allocation and rent for HEI are as follows:

Area attributed to HECO	5434
Area attributed to HEI	3272
Total Common Area	2459
Conference Room	676
Copier Room	122
Shredder Room	<u>78</u>
TOTAL square footage of 4 th Floor	12041

Area attributable to HEI for the 4th floor is as follows:

HEI Offices	3272
Prorated Common Area ($3272 / 8706 = 37.58\%$)	924
Portion of Conference Room ($676/2$)	338
Copier Room	61
Shredder Room ($78/2$)	<u>39</u>
TOTAL HEI 4 th Floor Area	4634
The basement storage area	274
3 rd Floor	<u>71</u>
TOTAL HEI SQUARE FOOTAGE	4979 sf

Based on the revised HEI square footage, the revised rental calculations will be effective as of June 1, 2007.

Ms. Pat Wong
May 3, 2007
Page Two


The new monthly base rent will be as follows:

4979 sf x \$2.84 = ^(A)\$14,140^(B) per month effective June 1, 2007.

If the above rental calculations are acceptable, please sign in the space provided and return an executed copy for our files.

If you have any questions, please contact me at x7896. Thank you.

APPROVED:



Patricia Uyehara Wong
Vice President
Hawaiian Electric Industries, Inc.

Date: MAY 7 - 2007

Cc: Amy Ejercito
Jim Beavers

TOTAL REVISED KING ST. RENT REVENUES:

1/07 - 5/07:

*8,219 sq. ft. * ^(A)\$2.84 * 5 MONTHS = \$116,710*

6/07 - 12/07:

*^(B)\$14,140 * 7 MONTHS = \$98,980*

\$215,690

JUNE 2007 UPDATE

Ref: Faye Chiogioji, HECO T-14, Updated Test Year Average and Test Year End of Year Employee Counts

In its response to CA-IR-27 and CA-IR-302, submitted on April 19, 2007 and May 30, 2007 respectively, the Company updated its Test Year Average and Test Year End of Year ("EOY") employee counts.

The Energy Services Department has been increased by two employees as a result of HECO's proposal to include DSM-related labor costs for two incremental regular HECO employees in base rates. See HECO's response to CA-IR-263, 122 and 130. The proposed classification of labor costs associated with these two regular HECO employees as base labor is consistent with the treatment by the Energy Services Department of all other regular HECO employee labor costs as base labor. An Updated HECO-1403 and an Updated HECO-WP-1401 were submitted on April 19, 2007 in response to CA-IR-27, pages 7 and 8, to reflect this update.

Subsequently, the Power Supply Process Area also increased its employee requirements by five employees to reflect the new organization that is described in detail by Mr. Dan Giovanni (T-6) in the Company's June 2007 test year update. An Updated HECO-1403 and an Updated HECO-WP-1401 were submitted on May 30, 2007 in response to CA-IR-302, pages 7 and 8, to reflect this update.

As a result of these updates, the Company's Test Year Average totals 1,553 as shown in the response to CA-IR-302, page 7, and the Company's Test Year EOY total is 1,561 as shown in the response to CA-IR-302, page 8.

JUNE 2007 UPDATE

Ref: Ken T. Morikami, HECO T-16, Plant Additions, Property Held for Future Use, Contributions in Aid of Construction, and Customer Advances

In its response to CA-IR-307, submitted on May 29, 2007, and subsequently updated on June 8, 2007, the Company revised its test year estimates for plant additions, Property Held for Future Use ("PHFFU"), Contributions In Aid of Construction ("CIAC"), and Customer Advances. The updated test year estimate for plant additions is now \$121,572,000, an increase of \$6,866,000 from the original test year estimate of \$114,706,000. This increase is primarily due to 1) projects that were estimated to be completed in 2006 were delayed and are now forecasted to be completed in 2007; and 2) the addition of new projects since the time of the forecast used in direct testimony. Included in the test year estimate are \$377,000 of plant additions that should have been reflected in 2008 and excess AFUDC of \$19,000 that will be removed from the rate base and addressed in settlement. A more detailed explanation of these issues may be found in the Company's responses to CA-IR-307 and CA-IR-311.

PHFFU was revised to reflect the purchase of the Campbell Industrial Park land parcels for the new generating plant in 2007 rather than the originally anticipated purchase date of 2006. Also, the amount of the purchase has been increased by \$187,000 to reflect the latest purchase price and closing costs, based on recent negotiations with the owner of the land. The new 2007 end-of-year balance for PHFFU is estimated at \$3,567,000 (see the Company's response to CA-IR-307, Attachment 2, page 1) versus the original estimate of \$3,380,000.

CIAC and Customer Advances for the test year have increased significantly with the updated estimates. The test year estimate for In-Kind CIAC has increased by \$2,456,000 from

\$4,011,000 to \$6,467,000, primarily due to the earlier scheduled receipt of military funds of \$3,000,000 associated with the 46kv feeders to Mamala Substation project (P0000834) which was originally anticipated to be received in 2008. Cash CIAC increased by \$5,692,000 from \$6,148,000 to \$11,840,000 (see the Company's responses to CA-IR-307 and CA-IR-313). This was due to the scheduled receipt of CIAC of \$1,044,000 associated with the new Mamala Phase 2-Mamala project (P0001356), the acceleration of military funds of \$2,215,000 for the Mamala Substation project (P0000833), and the collection of CIAC associated with Salt Lake Blvd Widening, Ph. 2 project (P0000143) which was originally scheduled for collection in 2006. Also, a higher forecast of CIAC associated with programs due to a higher historical average percentage (a more detailed description of the methodology used to estimate CIAC associated with programs may be found in the Company's response to CA-IR-313) increased the test year cash CIAC by \$297,000.

Customer Advances' receipts, refunds and transfers have all been updated, based on 2006 actual data, and the average test year balance for the Customer Advances account is now estimated at \$879,000 compared to the original test year estimate of \$822,000 (see CA-IR-307, Attachment 4). The increase is primarily due to a higher historical average for receipts (\$115,000 versus \$77,000) and a higher 2007 beginning balance, due to the updating of the 12/31/06 recorded balance. See the Company's response to CA-IR-307, Attachment 4, pages 2 and 3, which shows the methodology used to develop the updated customer advances estimate.